

**A STUDY ON OUTCOME OF 1000 CASES OF DIABETIC FOOT**

Dissertation submitted for

**M.S., DEGREE (General Surgery)**



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**CHENNAI - TAMILNADU**

## **CERTIFICATE**

This is to certify that this dissertation entitled “**A STUDY ON OUTCOME OF 1000 CASES OF DIABETIC FOOT** “ is bonafide record work done by **Dr. J. STANLY GLADSON DANIEL** under my direct supervision and guidance, submitted to the Tamil Nadu Dr. M.G.R. Medical University in partial fulfillment of University regulation for MS, Branch I – General Surgery.

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## **DECLARATION**

I **Dr.J. STANLY GLADSON DANIEL** solemnly declare that this dissertation titled “**A STUDY ON OUTCOME OF 1000 CASES OF DIABETIC FOOT**” has been done by me. I also declare that this bonafide work or a part of this work was not submitted by me or any other for any award, degree, diploma to any other University board either in India or abroad.

This is submitted to The Tamilnadu Dr. M. G. R. Medical University, Chennai in partial fulfillment of the rules and regulation for the award of Master of Surgery degree Branch –I (General Surgery) to be held in March 2010.

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# INTRODUCTION

Diabetes continues to be one of the most common underlying factors associated with lower extremity amputation in post industrialized and developing countries. Amputations are perhaps the most feared but ignored complication of Diabetes by the innocent general public.

For most patients, amputation is a pivotal event that alters their quality and duration of life and strain on heart, when amputated patients uses crutches or artificial limb. Amputations have been associated with an increased risk of reamputation of the same extremity, amputation of the contralateral leg, an elevated mortality in the first 3 – 5 years after amputation and placement in nursing homes or extended care facilities.

There are several well accepted predisposing factors that place patients with diabetes with a high risk for a lower extremity amputation. The most common components in the causal pathway to limb loss Include peripheral neuropathy, peripheral vascular disease, ulceration and infection. Ulceration that is unattended is the most common single precursor to amputation and has been identified as a component in 85% of lower extremity amputations.

As diabetic foot problems quickly reach the point of no return, it is vital to diagnose them early and provide rapid and intensive treatment. Furthermore, it is important to achieve early recognition of the at-risk foot so as to institute prompt preventive measures. The multidisciplinary foot clinic can reduce the numbers of amputations and enable us to take a new approach to the diabetic foot by early diagnosis and treatment.

Systematically recording the characteristics of ulcerations is critical to planning treatment strategies, monitoring treatment effectiveness, predicting clinical outcomes and improving communication among health care providers.

Most classification systems reported in the medical literature have primarily focused on the depth of the ulceration and have neglected or inconsistently included infection, peripheral neuropathy, peripheral vascular disease and previous amputation. These factors have been widely discussed in

the literature. The aim of this study was to study the prevalence of the risk

factors like, peripheral neuropathy and peripheral vascular disease among

thousand cases admitted to hospital and their influence in deciding the final

outcome of the patient. Also the prevalence of amputation at different levels is

studied.



## **AIM OF THE STUDY**

1. To study the outcome of 1000 cases of diabetic foot with respect

to primary healing and amputation

2. To study the prevalence of diabetic foot in patients admitted to

GRH with regard to age, sex distribution

3. To study the prevalence of peripheral neuropathy and peripheral

vascular disease

4. To study the amputation among these patients with regard to its

incidence and level of amputation

# MATERIALS AND METHODS

This study was conducted in Government Rajaji Hospital, Madurai from

July 2007 to August 2009 and included 1000 cases admitted in surgical ward.

Patients treated as OP are excluded from the study. As part of the protocol

patients treated in the ward have a standardized evaluation to assess peripheral

neuropathy and peripheral vascular disease.

The diagnosis of diabetes was verified for all patients using the criteria set

forth by the World Health Organization, which include treatment with insulin, two

random glucose measurements >200 mg/dl or a fasting glucose >126 mg/dl.

Sensory neuropathy was evaluated with a 10-g Semmes – Weinstein

monofilament wire and a modified neuropathy disability score.

The diagnosis of infection was made using clinical criteria. Wounds with

frank purulence and/ or two or more of the following local signs were classified as

“infected”. These signs include warmth, erythema, lymphangitis , lymphadenopathy, edema, pain and loss of function.

A working diagnosis of lower extremity ischemia was made by a combination of clinical and noninvasive vascular studies. Clinical signs were based on the absence of one or more foot pulses of the involved foot. Noninvasive criteria included an ankle-brachial index (ABI) of  $<0.80$ . Clinical signs and/or the presence of abnormal noninvasive values make a diagnosis of lower extremity vascular insufficiency.

The nature of treatment fall in

- 1) Debridement of wound
- 2) Amputation

To assess the level of amputation by stage and grade of wound we stratified all lower extremity amputations in the following levels

- 1) Toe
- 2) Tran metatarsal
- 3) Transtibial
- 4) Transfemoral

Chi-square analysis and odds ratio was used to demonstrate the potential

association between peripheral neuropathy, peripheral vascular disease and amputation.

## **PATHOPHYSIOLOGY OF DIABETIC FOOT**

Diabetes Mellitus is associated with more than half of all non-traumatic lower limb amputations. The major pathophysiology factors are ischemia, neuropathy and wound infection. They operate concurrently and sequentially, enhancing the risk for amputation fifteen fold in diabetic subjects compared to non diabetics. Since the diabetic foot is the sequel of interaction of multitude of factors, intervention must be directed towards correction of all causative factors.

## **CAUSATIVE FACTORS OF DIABETIC FOOT**

### **VASCULAR DISEASE:**

Diabetes mellitus is associated with structural changes in large as well as small blood vessels, resulting in ischemia. The atherosclerotic process in a diabetic occurs more frequently and at an early age and advances more rapidly compared to non diabetics and is devoid of the normal sex difference seen in the latter. The frequently associated risk factors for diabetic vascular disease include

smoking, hypertension, hyperlipidemia and insulin resistance with compensatory

hyperinsulinemia, besides the severity of duration of diabetes, age and genetic

factors. Smoking enhances the risk of peripheral vascular disease more than

hundred times compared to non- diabetes non smokers. However cessation of

smoking has been associated with a decrease in the progression of atherosclerosis.

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Hypertension is twice as common in diabetics as compared to non

diabetics; roughly one third to one half of diabetics have hypertension. Systolic

hypertension has been linked with disease of proximal blood vessels. A significant

association of hypertension with above knee and bilateral amputations have been

observed.

Numerous studies allude to the strong association of hyperlipidemia with

peripheral vascular disease. The ratio of LDL- cholesterol to HDL cholesterol

probably assumes greater significance in the diabetic population because the

protective effect of a high HDL cholesterol is nullified by a concomitant increase

in LDL cholesterol fraction.

## **NEUROPATHY:**

Loss of pain and thermal sensation renders the foot vulnerable to trauma

due to the mechanical, chemical and thermal factors leading to ulcerations. Loss

of proprioception and muscle atrophy due to motor neuropathy result in foot

deformities. The resultant alteration in the configuration with new pressure

points leads to callous formation and subsequent ulceration. Autonomic

neuropathy with absent sweating and dry, fissured skin offering portals of entry

for infection are important contributory factors for foot ulcer. The association of

autonomic neuropathy with foot ulcer is almost 100%.

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## **BIOMECHANICAL ASPECTS:**

Combination of neuropathy and trauma result in tissue breakdown. The

atrophy of the intrinsic muscle of the foot, predominantly plantar flexors of the

toes alters the flexor/ extensor balance at the meta tarso phalangeal joints and

causes clawing of the toes and prominence of the metatarsal heads.

Alterations

of foot shape results in increased plantar pressure. A majority of wounds on insensitive foot are not caused by accidental injury or ischemia but from

continuous pressure. Often moderate stress as occurring during locomotion on

the same part of the insensitive foot leads to callus formation and ulcer. The

presence of callus may exacerbate the problem both acting as a foreign body and

by increasing the plantar pressure.

Limited joint mobility is yet another factor contributing to elevated plantar

pressure. Glycosylation of collagen results in thickening and cross linking of

collagen bundles. This result in restriction of joint movements particularly sub

talar joint and the mechanism of walking. Limited joint mobility also occurs in the

hands.

## **HAEMORHEOLOGY**

Haematocrit, plasma viscosity, platelet activity and red blood cell

aggregation constitute macro vessel haemorheology, while micro vessel

haemorheology involves red blood cells and white blood cells deformability.

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All these factors are unfavorably altered in diabetic subjects, accentuating the

ischemic process due to structural changes of large and small blood vessels.

### **INFECTION:**

Frequent and severe infection in diabetic subjects is facilitated by vascular

insufficiency, a normal individual responds to infection by increasing the blood

supply to the site, as blood supply has to be increased 12 – 15 times to maintain

the viability of the skin. If this increased demand cannot be met, the skin breaks

down and tissue necrosis results. Necrosed tissue is a good nidus for organisms to

thrive.

Most of the diabetic foot infections are caused by multiple organisms

including anaerobes. Bacteroids are the commonest group of pathogens isolated

in culture. Soft tissue gas formation has been encountered in diabetic subjects



and the capacity for gas formation is exhibited not only by the coliform group

( aerobic and anaerobic gram negative rods ) but also by streptococci and

staphylococci. Osteomyelitis is observed in some of the diabetic foot lesions.

## **PERIPHERAL VASCULAR DISEASE**

The peripheral vascular disease occurring in diabetic subjects is multisegmental with a predilection for vessels below the level of the popliteal

artery; often the pathology is bilateral. These features are in marked contrast to

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those encountered in the non – diabetic population. Not uncommonly, the

collateral vessels especially peripheral are involved, with the result that gangrene

occurs in patchy areas of the foot and toes, in contrast to the extensive gangrene

occurring in the non diabetic subjects where major vessels are involved.

Patients may present with intermittent claudication, nocturnal pain and

rest pain, the latter two being relieved by dependency. Nocturnal pain is the form

of ischemic neuritis that proceeds to rest pain. During sleep the circulation

predominantly caters to the splanchnic area, resulting in diminished perfusion of

the lower extremities; consequently ischemic neuritis becomes intense and

disturbs sleep. The patient attempts to gain relief by standing, dangling the feet

or occasionally walking a few steps; the resultant increase in cardiac output

improves tissue perfusion, affording relief from pain. Failure of intervention at the

stages of nocturnal and rest pain ultimately results in tissue necrosis and

gangrene, necessitating amputation.

On examination of an ischemic limb, the feet are cold with absent pulses,

blanching on elevation with delayed venous filling. The skin appears shiny with

loss of hair and thickened nails. On the other hand, the neuropathic foot will be

warm and veins will be prominent on the dorsum of the foot due to arterio

venous shunts resulting from autonomic neuropathy.

## FEATURES OF THE ISCHEMIC FOOT:

- Painful lesions
- Dry black gangrene either confined to a toe or the heel, or extensive and infected
- Cold feet that become pale on elevation and cyanosed on depression
- Thin atrophic feet
- Thickened nails
- Sparse hair
- Peripheral pulses weak or absent
- Slow venous filling
- Vascular investigations, ischemia
- Normal or slightly reduced reflexes and sensation

## **FEATURES OF THE NEUROPATHIC FOOT:**

- Disproportion between lesions and absence of pain
- Keratosis
- Cracks
- Ulcers and plantar ulcers
- Deformity of foot and toes
- Amyotrophy
- Loss of sense of touch
- Loss of pain and vibration sensation
- Loss of tendon reflexes
- Warm dry feet
- Venous congestion

- Edema
- Pulses present
- No evidence of ischemia on investigations

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The vascular laboratory provides essential additional information

which serves to initiate measures in the management of peripheral vascular

disease. The ankle and toe pressures, ankle – brachial systolic pressure ratio

( ischemic index ), the wave pattern of flow, are some of the indices

routinely used in the assessment. An ankle pressure of less than 70 mmHg

is associated with poor healing of ulcers while a pressure of more than 100

mm Hg is associated with good prognosis. Similarly a toe pressure of less

than 200 mmHg has been found to be associated with increased failure of

distal amputation while more than 40 mmHg is associated with good

prognosis. An ischemic index of 0.45 with pulsatile flow indicated healing in

93% of subjects while an index below 0.45 necessitated evaluation for

vascular reconstruction.

However, the outcome of non invasive vascular studies should not be

allowed to influence clinical judgment on site selection for amputation,

because falsely high segmental systolic pressures could be obtained with a

rigid calcified lower extremity artery. In fact the importance of pulsatile wave forms on arterial impedance Plethysmography is more reliable

parameters of prevailing vascularity.

Sophisticated techniques are now available for vascular assessment

in predicting healing of amputation and ulcers. Skin blood flow calculated

from Xenon – 133 clearance, a micro invasive procedure and

transcutaneous oxymetry are some of those techniques. Cutaneous blood

flow of more than 2.6 ml /100 g / min has been associated with good

healing. However all the above indices may fail to predict healing accurately

because the state of the local wound dominates the outcome. For example,

a severe infection can dampen the beneficial effects of the marginal blood

flow or occasionally even a good blood flow.

## **NEUROPATHY:**

The classical peripheral neuropathy of diabetes mellitus is often bilateral; and symmetrical. The sensory component predominates, with

patients complaining of pain and paresthesias while on objective examination there is blunting of pain and temperature sensation – “the

painful painless leg". The sensory disturbances generally appear early in

distal portions of the lower extremities, eventually progressing to a stock

and glove distribution. Involvement of large sensory and motor fibres

impairs light touch and proprioception and causes weakness of intrinsic

muscles of the feet with alteration of pressure points.

Neuropathy can be assessed by clinical examination and conduction

studies. Autonomic neuropathy with its important contribution towards the

propagation and maintenance of foot ulcer can be assessed at the bedside

by a battery of tests. Since the peripheral nerve is the common pathway for

neural flow, severe peripheral neuropathy is manifested by autonomic

disturbances in the periphery.



## **REPETITIVE MODERATE STRESS:**

In a normal as well as in insensitive feet, walking briskly is accompanied by progressive hyperemia over points of maximum stress.

Thermography helps to outline the temperature contrast of progressive

inflammation from such a process. In subjects with insensitive feet

thermographic pattern shows hyperemia at sites of old scar, thereby

inferring that these subjects have been stressing that particular area more

than optimally, due to absence of pain and as a result of motor neuropathy.

Similarly, in-shoe foot prints help to detect the points of persistent and

maximum stress on the feet which probably could be alleviated by proper

footwear.

## INFECTION:

Many diabetic foot ulcers tend to be neglected because the lesions

are asymptomatic. Osteomyelitis should be suspected when non-healing

ulcer overlies a bony prominence. It should however be distinguished from

diabetic osteopathy and neuroarthropathy, occurring as a result of

denervation. The radiological hallmark of diabetic osteopathy is the

characteristically pointed metatarsal called “the peppermint stick sign”. The

distribution of diabetic osteopathy is multifocal and bilateral; besides, the

condition associated with normal leucocyte count and ESR. However, the

distinction between osteomyelitis and osteopathy is often made on clinical

grounds.

Infection is the second common associated factor in Diabetic foot

ulcer. The longer ulcer is present, more likely the surrounding tissue will

acquire increased bacterial load. Increased abnormal bacterial bioburden

significantly delay wound healing because they compete for Oxygen and

nutrients. When local signs of infection are present increased discharge

precedes frank purulence and local malodor. The surrounding tissue may

become edematous, erythematous and can be painful in an otherwise painless foot. The average number of organisms is as high as 4.8 species per

ulcer from qualitative bacterial skin biopsy.

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When in doubt about presence or absence of infection, the use of an

infrared thermometry device may help diagnostically. The thermometer

should be used on 4 quadrants surrounding ulcer and compared to

opposite foot in same location. Difference of 4 to 5 degree F or more suggest infection.

Surface bacterial culture of wound are often misleading and may not

represent the organism within underlying granulation tissue of the wound.

While the “gold standard” is a punch or tissue biopsy, these approaches are

invasive and specialized microbiologic processing is not easily available.

### **Severity of Infection:**

Severity of infection helps to assess potential necessity and timing of surgery. The key factors in classifying a foot infection are assessing the depth of the wound ( by both visually inspecting the tissues involved and estimating depth in millimeters), the presence of ischemia ( absent pulses or diminished blood pressure in the foot), and the presence of infection.

Because of the anatomy of the foot deep space infections often have deceptively few signs in the plantar or dorsal aspects. Thus it is critical that a patient with even mild swelling of the foot but with systemic toxicity be evaluated for an occult deep space infection.

### Simple clinical classification of severity of diabetic foot infections:

S. N	CLASS	Superficial Ulcer Or Cellulitis	Deep soft or Bone Infection	Tissue Necrosis or Gangrene	Systemic Toxicity
1.	Mild	+	--	+/--	--
2.	Moderate	+	+/-	+/--	--
3.	Severe	+	+/--	+/--	--

### CHARCOTS FOOT:

Charcot foot or neuroarthropathy is defined as a relatively

painless, progressive, degenerative arthropathy of single or multiple joints

caused by underlying neuropathy. Charcot neuropathy is characterized by

simultaneous presence of bone and joint destruction, fragmentation and

remodeling. Diabetes is the commonest cause of charcot foot and most

patients have a dense neuropathy but good circulation. Walking on an

insensitive foot leads to excessive and repetitive stress to bone causing

micro fracture and finally bone and joint destruction. Diabetic neuropathy and presence of auto sympathectomy lead to peripheral vasodilatation.

( warm foot ). A significant arteriovenous shunting takes place leading to

abnormal bone cell activity (osteoclastic) and eventual resorption and weakening of bone. Ultimately the foot shape is deformed and runs into a bag of bone.

Bone and joint damage in the meta-tarsal region is the commonest

site of involvement and leads to the two classical deformity.

1)Rocker bottom deformity in which there is displacement and subluxation of the tarsus downward.

2)Medial convexity, which results from displacement of the talo-navicular joint or from tarso-metatarsal dislocation.

Both are often associated with a bony prominence which is very

prone to ulceration. Healing is notoriously difficult. If these deformities are

not diagnosed early and accommodated in properly fitting footwear,

ulceration at vulnerable pressure points often develops.

It is not uncommon to mistake acute charcot foot for cellulitis and osteomyelitis. If the affected foot is elevated, the erythema will recede

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whereas that of cellulitis will persist. Should not be mistaken for cellulitis and operated upon.

Plain X- ray of the foot will show demineralization, bone destruction and periosteal reaction. Marked osseous resorption of bone results in “ pencil pointing” and “sucked candy” deformities of the metatarsal heads and shafts. In the largest joints of the foot there will be destruction of bone and new bone formation.

The treatment is conservative, mainly immobilization either by total contact cast or the diabetic air cast walker with inflatable air cells. There is some evidence on that biphosphanate drugs given intravenously in the

acute phase may shorten the duration of the acute phase presumably by

reducing the bone turnover directly and also slowing down the process

which weakens the bone and renders it susceptible for foot fracture and

fragmentation.

It is a dictum that a “ warm swollen foot in a diabetic with neuropathy

without local and systemic signs of infection , charcot foot must be

considered until proven otherwise”.



# EVALUATION OF DIABETIC FOOT

## Assessment of Neuropathy

Neuropathy is the most common complication of diabetes affecting 50% of all diabetic patients. Although it may present with tingling and feeling of numbness, it is asymptomatic in majority of patients and neuropathy will be only detected by clinical examination. An important indication neuropathy will be a patient who fails to complain of pain, even when significant foot lesions are present. Painless ulceration is definite evidence of a peripheral neuropathy.

The presentation of peripheral neuropathy is related to dysfunction of sensory, motor and autonomic nerves. Simple inspection will usually reveal signs of motor and autonomic neuropathy but sensory neuropathy must be detected by screening or by a simple sensory examination.

### Motor Neuropathy:

The classical sign of a motor neuropathy is a high medial longitudinal arch,

leading to prominent metatarsal heads and pressure points over the plantar

forefoot. In severe cases, pressure points also develop over the apices and dorsal

interphalangeal joints of associated claw toes. However claw toe is a common

deformity and may not always be related to a motor neuropathy. It may be

caused by wearing unsuitable shoes or trauma or may be congenital.

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Congenital assessment of motor power in the foot or leg is not usually

necessary, but it is advisable to test dorsiflexion of the foot to detect a foot drop

secondary to a common peroneal nerve palsy. This is usually unilateral and will

affect the patient's gait.

## **Autonomic Neuropathy:**

The classical signs of autonomic neuropathy are:

- Dry skin with fissuring

- Distended veins over the dorsum of the foot and ankle

## Sensory Neuropathy

Sensory neuropathy can be simply detected by,

- Monofilaments

- Neurothesiometer

If these are not available then a simple clinical examination detecting sensation

to light touch using a cotton wisp and vibration using a 128 Hz tuning fork will

suffice, comparing site with a distal site to confirm a symmetrical stocking like

distribution of the neuropathy.

## Monofilament

The Semmes- Weinstein monofilament is a valuable, easy to use tool. The

monofilament is a long nylon wire, the tip of which gives a force of 10 grams is

pressed perpendicularly against the skin to the point of buckling for at least one

second. The points of testing are plantar aspects of 1<sup>st</sup>, 3<sup>rd</sup> and 5<sup>th</sup> digits, the plantar aspects of 1<sup>st</sup>, 3<sup>rd</sup>, 5<sup>th</sup> metatarsal heads, the plantar midfoot medially and

dorsally and the plantar heel(10 sites totally). Neuropathy is said to exist when 4

out of these 10 sites show absence of sensation when the wire is pressed against

the skin.

An alternate method of testing neuropathy is use of biothesiometer

(vibration perception threshold meter ). This had a hand held probe whose tip

vibrates at 100 Hz. The voltage supplied to the probe can be adjusted from 0 to 50

V. The probe is placed against the skin and voltage increased till he perceives the

vibration. Mean of three readings is used to determine the VPT for each foot.

Normal reading should be less than or equal to 25 V.

## **Assessment of peripheral vasculature**

This includes palpation of the pulses ( dorsalis pedis, posterior tibial,

Popliteal and femoral). Absence of distal pulses in a diabetic foot is a sure sign of

significant arterial disease. However presence of palpable pulse does not

absolutely exclude vascular disease.

Ankle brachial index is a simple method of assessing vascular insufficiency.

It is obtained by dividing the ankle systolic pressure by the brachial systolic

pressure. Normal values are  $1.0 \pm 0.1$ . However the ABI can be deceptive

because calcification of vessels in diabetes can lead to falsely elevated ABI.

If facilities are available one can make a more detailed assessment of

peripheral circulation by measuring toe pressure (using a photoplethysmograph).

Normal systolic toe pressure is  $>4$  KPA. Transcutaneous oxygen tension ( $N > 40$

mmHg ) is another noninvasive test of circulation in the periphery. Reduced

oxygen tension is associated with significant vascular disease and so,

transcutaneous oxygen tension has been used to assess ulcer healing potential

and also determine amputation levels.

Once vascular disease has been diagnosed, it may be assessed in detail

using duplex scanning of the arterial system. If vascular construction is planned an

angiogram is considered. However angiogram, despite being the gold standard,

has limitations since we may not be able to use it in patients with diabetic

nephropathy.

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## **Assessment of Osteopathy**

Plain X-rays are not always reliable in diagnosis of early osteomyelitis,

though diagnosis of advanced osteomyelitis is relatively straight forward. It is

difficult to differentiate between osteomyelitis and diabetic osteoarthropathy. It

is reasonable to presume that osteomyelitis exists if one is able to probe to bone

during clinical evaluation of an ulcer.

## **Deformity**

Deformity often leads to bony prominences, which are associated with

high mechanical pressures on the overlying skin. This results in ulceration,

particularly in the absence of protective pain sensation and when shoes are unsuitable. Common deformities includes,

- Claw toes
- Pes cavus
- Hallux rigidus

- Hallux valgus
- Hammer toe
- Mallet toe
- Fibro fatty padding deletion

#### Charcot foot

- Deformities related to previous trauma and surgery
- Nail deformities

## Callus

This is thickened area of epidermis which develops at sites of pressure, shear and friction. It should not be allowed to become excessive as callus is a common fore runner of ulceration in presence of neuropathy.

## Swelling

Swelling of the tissues of the foot is a major factor predisposing to

ulceration and organ exacerbates a tight fit inside poorly fitting shoes. It also

impedes healing of established ulcers.

## **Skin Breakdown**

An active search should be made for breaks in the skin over the entire

surface of the foot and ankle, not forgetting the areas between the toes and at

the back of the heel. Toes should be gently held apart for inspection. If jerked

apart, this can split the skin. The classical sign of tissue breakdown is the foot

ulcer. However fissures and bullae/ blisters also represent breakdown of the skin.

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Some lesions will be obvious; others will make their presence known by

their complications such as;

- Discharge or exudates
- color changes under callus or nail plate
- pain or discomfort



- swelling
- warmth
- erythema

## **Infection**

When skin breakdown develops, it may act as a portal of entry for infection.

A close inspection for signs of infection should be made. These include purulent

discharge from the lesion and erythema swelling and warmth of the toe or foot.

## **Necrosis**

Finally lesions of skin breakdown may progress to underlying necrosis. This

can be identified by the presence of black or brown devitalized tissue.







# INTEGRATED EXAMINATION

In practice the examination of the foot should be divided into four main

parts: inspection, palpation, neurological examination and vascular assessment.

## 1) **Inspection**

The foot should be fully inspected including dorsum, sole, back of the heel

and interdigital areas with a full assessment.

- Color ( as an indicator of ischemia)
- Deformity
- Swelling
- Callus
- Skin breakdown
- Infection
- Necrosis

## 2) **Palpation**

Pulses should be palpated and skin temperature compared between both

feet with the back of the examining hand. The measurement of the skin

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temperature is particularly helpful in the management of the charcot foot when a

digital skin thermometer is useful.

## **Neurological assessment**

Peripheral neuropathy should be detected either by using the monofilament or Neurothesiometer or by performing a simple sensory examination.

## **Vascular status:**

All the peripheral pulses must be examined and compared with the normal

limb. With regard to lower limb femoral, popliteal, dorsalis pedis and posterior

tibial arterial pulse must be examined

# CLASSIFICATION OF DIABETIC FOOT

## Wagner Classification

Grade 0 – No ulcer but high risk foot ( deformity or cellulitis)

1 – superficial diabetic ulcer ( partial/ full)

2 – ulcer expands to ligaments, tendons, joints, capsule or deep fascia

without abscess and / or osteomyelitis

3 – deep ulcer with abscess/ osteomyelitis / joint sepsis

4 – gangrene localized to portion of fore foot ( toe/ heel)

5 – extensive gangrenous involvement of entire foot

The other classification that can also be used is **SAN – ANTONIO UNIVERSITY OF**

**TEXAS WOUND CLASSIFICATION.**

# MANAGEMENT OF DIABETIC FOOT

## (a) **WAGNER grade 0 foot:**

This includes patients with apparently normal foot, varying degrees of

neuropathy or joint deformities. They may not have any ulcer or infection but are

potentially “at risk”. They need regular assessment at least annually. Neuropathy

must be looked for during each assessment. The best way to prevent neuropathy

or delay it is to keep blood sugar under control.

Assessment of vascular status is also mandatory. Absent foot pulses even in the absence of claudication or rest pain indicates significant vascular disease and such patients may be suitable candidates for vascular reconstruction or angioplasty. Remember that a diabetic may not manifest claudication symptoms if he had neuropathy.

These “at risk” patients may have elevated pressures over some points on the sole. They need appropriate footwear (extra depth shoes with cushioned insoles). Charcot’s feet may need custom shoes.

Regular trimming of callus is needed. These patients also need advice

regarding care of feet/ pedicure.

(b) **WAGNER grade 1 foot:**

These are patients who have presented with either cellulitis or a superficial Ulcer. Ulcer occurs either with repetitive low pressure or sustained high pressure

(>6 kg/cm) at that point on the sole during walking.

Relief of pressure is the mainstay of ulcer treatment. An ulcer will not heal if the patient walks on it. A variety of ways are available to “off load” the ulcer.

These include complete bed rest use of total contact caste walkers, braces etc.

As in the case of grade 0 feet, appropriate management of vascular disease is needed. Infection needs antibiotics and debridement as appropriate.

Education, foot care, footwear and regular careful follow up are the principle factors in management of grade 1 feet.

(c) **WAGNER grade 2 and 3 feet:**

These are patients with deep ulcers with or without complications like abscesses and osteomyelitis. These patients need aggressive surgical debridement. Osteomyelitis must be appropriately managed by debridement/ excision of infected bone.



Once the ulcer has healed, the patient needs long term care to devise appropriate foot wear and also education regarding foot care, in order to avoid recurrence.

(d) **WAGNER grade 4 and 5 feet:**

These are patients who have either localized or extensive gangrene. They need minor or major amputation respectively. Almost always there is vascular occlusive disease.

These patients therefore need appropriate surgical amputation followed by vascular reconstructions.

After care involves special footwear for the ipsilateral and contralateral foot. (These patients tend to over use the other foot and develop ulcers of the opposite foot). In case of major amputees, prosthetic devices need to be fitted in order to mobilize the patient. Mortality rate of diabetes after a major amputation is nearly 50% at one year.

# FOOTWEAR RECOMMENDATIONS IN DIABETICS

The recommendations are based on the following grading:

RISK CLASS	FEATURES
0 (low risk)	Has normal protective sensations
1 ( medium risk)	Has neuropathy but no deformity or  Previous ulceration or amputation
2 (high risk)	Neuropathy + deformity present  But no previous ulceration or amputation
3 (very high risk)	Neuropathy + deformity + history of  previous ulcer or amputation

## **Risk class 0:**

Essentially normal patients. They need to be advised to wear shoes with

thick sole (to absorb vertical compressive forces) with soft uppers ( to mould foot

shape and avoid shoe bite) with ample toe box ( to be able to wiggle toes).

## **Risk class 1:**

They are potential candidates for ulcerations, since they have no protective

sensation. These patients need advice on foot care (do not walk barefoot, avoid

bathroom surgery, avoid extremes of temperature while washing feet ), in

addition they need foot wear that satisfies all criteria for class “0” but also has a

pressure dissipating accommodative insole (to avoid local high pressures).

## **Risk class 2:**

These are neuropathic patients with foot deformity (such as bunions, claw

toe, hammer toe). They need a footwear with extra soft accommodative uppers

that mould to the foot's shape while allowing enough space for toe movement.

The sole may need to have recessed heel (to reduce impact at "heel strike" phase

of gait) along with angulation of the sole just behind the metatarsal heads (so that

a rolling motion is obtained during walking – like a "rocker – bottom"). A total

contact insert is beneficial.

### **Risk class 3:**

These are patients who have already ulcerated once and are likely to do so

repeatedly. They need footwear recommendations as for a grade 2 well fitting

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shoes with a rocker bottom sole and moulded insoles.

In case of patients with active ulceration, various options are available to off-load the foot. These are:

1. Total contact cast
2. Air cast or patellar tendon weight bearing brace
3. Temporary shoes (talus shoes, which has no sole in the front so that

patient walks only on heel.

4. Customized foot wear (applicable to patients with charcot's foot who

have disrupted bony architecture of foot).

## **ANTIBIOTICS:**

Antibiotic therapy should be instituted with a broad spectrum antibiotic

immediately after obtaining the cultures. Antibiotic should be effective for gram

positive and gram negative organisms.

Criteria for hospitalizing a patient for treatment of infection  
parenteral

antibiotics includes sepsis, temperature elevation, leucocytosis, peripheral  
arterial

disease and uncontrolled diabetes.

## **ADJUNCTIVE THERAPY FOR WOUND HEALING**

Investigations have shown that autologous platelet derived growth factor

Formula (PDGF) can be an important adjunct to heal wounds that have shown

resistance to comprehensive approaches. Steed has shown that recombinant

PDGF significantly achieved complete healing in diabetic foot wounds when

compared to standards of care alone. Recombinant PDGF in a gel caplermin is

applied once a day to the wound and covered with moist gauze dressing.  
A

dressing change without PDGF is applied approximately 12 hours later.  
PDGF

should not be used when there is extensive necrosis, active infection , and/  
or

ischemia.

The use of living tissue equivalent is another new technique for  
accelerating

wound healing in diabetic foot ulcers. Dermograft is derived from  
cultured

human dermis. It is derived from foreskin tissue cultures. Dermagraft  
consists of

neonatal dermal fibroblasts cultured in vitro onto a bioabsorbable mesh.  
This

produces living metabolically active tissue containing normal growth factors  
and

cytokines.



Hyperbaric oxygen (HBO) is gaining favor as treatment for diabetic foot

wounds. Orianni et al. found that amputation rates in 62 diabetics who were

treated for foot ulcers with HBO was only 4% compared to 49% of the control

group who were unable or unwilling to undergo the therapy with HBO. Systematic

hyperbaric oxygen greatly increases tissue oxygen levels. Oxygen tension values

remain elevated for several hours after exposure. It must be kept in mind that

HBO is a supplemental treatment to standard wound care. It is ineffective in

patients with severe peripheral vascular disease. Hyperbaric oxygen delivered by

a hyperbaric boot is of no value. It must be delivered by putting the patient into

single or multiple person chambers.

Electrical stimulation is another form of therapy for wound healing.  
William

gilbert proposed the use of electrical stimulation for wound healing as far back as

1600. This was followed by a number of contributions over the years. Wood and

colleagues found the pulse lower intensity direct current represented a useful

approach for the treatment of chronic ulcers.

Recently, Baker et al found that electrical stimulation given daily with short

pulsed asymmetric biphasic waveform was effective for enhancement of healing

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rates for patients with diabetes and open wounds. Using this technique they

found a significant increase in the healing rate by nearly 60% in patients treated

with electrical stimulation compared to controls. Patients treated with

asymmetric biphasic square wave pulse did not show any increased wound

healing. Lundberg et al, also reported improved wound healing of diabetic ulcers

using electrical nerve stimulation.

Ultrasound has also been suggested as a treatment for healing diabetic

wounds. Ultrasound refers to high frequency, mechanical vibrations that are

produced when electrical energy is converted to sound waves. Ultrasound gets its

name because the sound is beyond the range of human hearing, ultrasound may

be helpful because of its stimulatory effects in fibroblasts and macrophages and

on angiogenesis. Ultrasound can cause dire consequences when applied in an

improper manner, and this may result in tissue destruction.

Again it must be kept in mind that wound healing using electrical

stimulation or ultrasound is still experimental and further control studies will be necessary to prove conclusively their efficacy in the treatment of diabetic foot wounds.

# Debridement

Aggressive, ongoing surgical debridement converts a chronic nonhealing

ulcer into an acute healing wound. Adequate debridement of necrotic tissue

(eschar, slough) is needed before adequate assessment and staging can be

accomplished. There are several methods for wound debridement, including

sharp surgical, mechanical, enzymatic and autolytic. Truly it is a continuum, from

flushing away debris with low pressure irrigation to wide excision.

Following factors must be considered

- 1) Selective versus nonselective method
- 2) Presence or absence of pain

3) Arterial Insufficiency ( Dry Gangrene)

4) Drugs that may increase bleeding (e.g. Coumadin, aspirin, NSAID's)

5) Resources and setting

### **Sharp surgical debridement:**

The most selective and efficacious method of debridement is sharp surgical

debridement. Debridement of the hyperkeratotic rim and ulcer base to bleeding is

the optimal method of debridement for the patient with an ulcer.

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### **Autolytic Debridement:**

Autolytic debridement with moist interactive dressings (hydrogel, alginates,

transparent film, hydrocolloids) is selective and liquefies slough and eschar as well

as promotes granulation tissue formation.

### **Mechanical Debridement:**

Mechanical debridement may be accomplished with wet – to – dry gauze

dressings, irrigation, pulsatile lavage or whirlpool.

### **Enzymatic Debridement:**

Historically enzymes (collagenase, papain, urokinase, etc.,) have been used

as debriding agents for eschar and slough. They have a selective action, but are

slow, costly and labor intensive. It is replaced by Sharp Surgical debridement.

### **Biologicals: Human Skin Equivalents and Skin Grafts:**

The nonhealing wound may have a deficiency of growth factor  
or

nonresponsive cells. Platelet derived growth factor can help to stimulate  
some

nonhealing wounds. Recent advances in tissue culture techniques have  
made it

possible to culture cells from human foreskin donors. Human skin  
equivalent like

Apligraf can be used. Split skin graft is an ideal procedure to cover raw  
area in

the absence of infection.







## **Lower limb amputations:**

The risk factors for amputation identified are long duration of diabetes,

neuropathy and peripheral vascular disease: high levels of HbA<sub>1c</sub> or fasting

plasma glucose; and a history of ulcers, amputations, retinopathy and patient

education. The two protective factors identified were provision of outpatient diabetes education and use of aspirin.

The loss of peripheral sensation decreases patient's awareness of foot pressure, discomfort and even pain and increases the risk of ulceration and amputation.

Peripheral vascular risk factors included low TcPo<sub>2</sub> low AAI and absent or

diminished dorsalis pedis and posterior tibial pulses. Major symptoms of lower

limb arterial disease are intermittent claudication, absent peripheral pulses and

rest pain.

High blood pressure was an independent predictor of amputation.  
Poor

glycemic control has been associated with an increased risk of amputation.  
Other

risk factors are cigarette smoking and lipoprotein abnormalities.

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## **OBSERVATIONS AND RESULTS**

In our study, Diabetic foot ulcer was more common in Males. Out of  
1000

Patients, 614 were males which forms 61.4% and 386 were females which  
forms

38.6%.

SEX	PATIENTS	
	No.	%
Male	614	61.4
Female	386	38.6

The most common affected age group was between 50 to 60 years in both

males and females.

Mean age of males is 59.5 years

Mean age of females is 51.3 years

## AGE DISTRIBUTION IN MALES:

AGE	PATIENTS	
	No.	%
< 40	18	2.9
41 -- 50	71	11.6
51 – 60	249	40.6
61 – 70	240	39.1
> 70	36	5.8
Total	614	100
Mean age	59.5 years	

51 – 60 were the most common age group affected among males with 249

patients affected comprising 40.6 %.

61 – 70 were the next most common affected age group with 240 patients

comprising 39.1 %.

Less than 40 years age group was the least affected comprising 18 patients

forming 2.9%

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#### AGE DISTRIBUTION AMONG FEMALES:

AGE	PATIENTS	
	No.	%
< 40	13	3.3
41 -- 50	161	41.6
51 – 60	166	43.1
62 – 70	37	9.6
> 70	9	2.4
Total	386	100
Mean age	51.3 years	

The most common age group affected among females was 51 – 60 years

with 166 patients comprising 43.1 %.

The next most affected age group was 41 – 50 years with 161 patients

forming 41.6%.

More than 70 years age group was least affected with only 9 patients involved forming 2.4 %

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## **PREVALENCE OF PERIPHERAL NEUROPATHY:**

Peripheral neuropathy was found to be prevalent among 272 patients forming 27.2 %. Among them 140 patients were male and 132 patients were



female.

SEX	PATIENTS	
	No.	%
Male	140	51.4
Female	132	48.6

The most common affected age group was 61 – 70 in both sexes.

AGE	PATIENTS	
	No.	%
41 -- 50	32	11.8
51 – 60	89	32.7
61 – 70	137	50.3
> 70	14	5.2
Total	272	100

## PREVALENCE OF PERIPHERAL VASCULAR DISEASE:

Peripheral vascular disease was found to be prevalent among 188 patients

forming 18.8 %. Among them 114 patients were male and 74 patients were female.

SEX	PATIENTS	
	No.	%
Male	114	60.6
Female	74	39.4

The most common affected age group was 51 – 60 in both sexes.

AGE	PATIENTS	
	No.	%
41 -- 50	37	19.6
51 – 60	89	47.3
61 – 70	54	28.7

> 70	8	4.4
Total	188	100

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## PREVALENCE OF AMPUTATION:

154 patients underwent some form of amputation forming 15.4 %.  
Among

them 92 patients were male and 62 patients were female.

SEX	PATIENTS	
	No.	%
Male	92	59.7
Female	62	40.3

The most common affected age group was 51 – 60 in males and 61-70 in females.

## AGE DISTRIBUTION AMONG MALES:

	PATIENTS
--	----------

<b>AGE</b>	<b>No.</b>	<b>%</b>
41 -- 50	15	16.3
51 – 60	48	52.2
61 – 70	27	29.3
> 70	2	2.2
Total	92	100

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#### AGE DISTRIBUTION AMONG FEMALES:

<b>AGE</b>	<b>PATIENTS</b>	
	<b>No.</b>	<b>%</b>
41 -- 50	15	24.1
51 – 60	19	30.6
61 – 70	27	43.5
> 70	1	1.8
Total	62	100

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The different levels of amputations that the patients underwent were:

- 1) Toe
- 2) Tran metatarsal
- 3) Below knee or Transtibial
- 4) Above knee or Transfemoral

DISTRIBUTION OF LEVELS OF AMPUTATION:

LEVEL OF AMPUTATION	PATIENTS	
	No.	%
Toe	63	41.2
Trans metatarsal	16	10.5
Below knee or Transtibial	44	28.2
Above knee or Transfemoral	31	20.1
Total	154	100

## DEBRIDEMENT AND SKIN GRAFT:

Sharp surgical debridement was done in 846 patients and limb was

salvaged without any form of amputation. Among these patients 19 received split

skin graft to cover the raw area. The average graft take was more than 95 %.

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**Toe amputation - 41.2 %**

**Trans metatarsal amputation – 10.5 %**

**Trans tibial amputation – 28.2 %**

**Trans femoral 20.1 %**

**RELATIONSHIP BETWEEN NEUROPATHY AND TREATMENT**

NEUROPATHY	TREATMENT							
	Debridement		Toe Amputation		Trans Metatarsal Amputation		BK and AK Amputation	
	No.	%	No.	%	No.	%	No.	%
Present (272)	155	57	34	12.5	15	5.4	68	25
Absent (728)	702	96.4	26	3.6	0	-	0	-
<b>P Value</b>	<b>0.015 ( Significant)</b>							

30 % of patients with Neuropathy received high level amputation. All

patients without neuropathy did not receive mid foot or higher level amputation.

Thus presence of Neuropathy increases severity of treatment. This relationship is

statistically significant as P value is less than 0.05.



## RELATIONSHIP BETWEEN ISCHEMIA AND TREATMENT

PERIPHERAL VASCULAR DISEASE	TREATMENT							
	Debridement		Toe Amputation		Trans Metatarsal Amputation		BK and AK Amputation	
	No.	%	No.	%	No.	%	No.	%
Present (188)	110	59.2	18	9.5	9	4.9	51	26.4
Absent (812)	777	95.7	33	4.0	2	0.3	0	-
P Value	0.017 ( Significant)							

31.3 % of patients with Ischemia received high level amputation. All patients without Ischemia did not receive higher level amputation.

Thus presence of Ischemia increases severity of treatment. This relationship is

statistically significant as P value is less than 0.05.

## **DISCUSSION**

### **Age and Sex:**

In our study, Diabetic foot ulcer was more common in males (61.4 %).  
The

most common affected age group was between 50 to 60 years in both  
males and

females. Mean age of males is 59.5 years and females is 51.3 years.

### **Neuropathy:**

The prevalence of peripheral neuropathy among the diabetic foot  
patients

was 27.2 %. The most common affected age group in both sexes was 61  
– 70

years. 30 % of patients who presented with neuropathy were amputated at  
Trans

metatarsal level or proximally and it was statistically significant.

## **Ischemia:**

The prevalence of peripheral neuropathy among the diabetic foot patients

was 18.8 %. The most common affected age group was 51 to 60 in both sexes.

31.3 % of patients who presented with ischemia were amputated at Trans

metatarsal level or proximally and it was statistically significant.

## **Amputation:**

The prevalence of amputation among diabetic foot patients in our study

was 15.4 %. The most common affected age group was 51 to 60 in males and

61 – 70 in females. Males more commonly underwent amputation than their

female counterparts in the ratio of 1.4 : 1. Distal amputation in the form of toe

or trans metatarsal was done in 51.7 % patients. 48.3 % patients underwent

proximal amputations in the form of Trans tibial or Trans femoral amputation.

## CONCLUSION

- In our study, Diabetic foot ulcer was more common in males (61.4 %).  
The

most common affected age group was between 51 to 60 years in both males and

females. Mean age of males is 59.5 years and females is 51.3 years.

- One- fourth of the patients had Peripheral Neuropathy . 30 % of patients

who presented with neuropathy were amputated at Trans metatarsal level or

proximally and it was statistically significant.

- One- fifth of the patients had Peripheral Vascular Disease with a significant

male preponderance. 31.3 % of patients who presented with ischemia were

amputated at Trans metatarsal level or proximally and it was statistically

significant.

- Amputation rates was 15.4% among diabetic foot patients with a significant

Male preponderance. Distal amputations was more commoner than proximal

amputations.

- Thus Peripheral Neuropathy and Peripheral Vascular Disease play a definite

role in the outcome of the wound and it can be detected by simple examination

and non invasive test.

- Awareness of Diabetic foot complications has to be increased among the

Diabetic patients and their relatives by educating them, since the outcome was

very good in early diagnosis of Diabetic foot.

- All newly diagnosed Diabetics, must be evaluated for Diabetic foot and foot

care has to be given routinely to prevent the Diabetic foot complications at latter date.



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# PROFORMA

Name :

Age:

Sex:

IP No.:

Ward No.:

Date of Admission :

Date of Discharge :

Hypertension : Yes / No

Smoking : Yes / No

Peripheral Neuropathy : Yes / No

Examination of Pulses:

Pulses	Right	Left
Femoral		
Popliteal		
Posterior Tibial		
Dorsalis Pedis		

Ankle Brachial Pressure Index:

	Right	Left
Brachial Pressure		
Ankle Pressure		

Wagner's Grade of Ulcer:

## Treatment Given:

- 1) Debridement
- 2) Skin Graft
- 3) Amputation
  - a) Toe
  - b) Trans Metatarsal
  - c) Trans Tibial
  - d) Trans Femoral

# MASTER CHART

S.N O	NAME	Age	Sex	IP NO	PN	PVD	TREATMENT
1	Peumal	39	M	92182	-	-	DEBRIDEMENT
2	Kuppammal	71	F	52132	+	+	BK AMPUTATION
3	Andy	49	M	67694	-	-	DEBRIDEMENT
4	Lakshmi	61	F	51213	-	-	DEBRIDEMENT
5	Periakaruppan	55	M	43441	+	+	TOE AMPUTATION
6	Sundaram	59	M	43529	-	-	DEBRIDEMENT
7	Murugeshwari	54	F	43114	-	-	DEBRIDEMENT
8	Irulandi	62	M	45237	+	-	AK AMPUTATION
9	Murugayee	48	F	67543	-	-	DEBRIDEMENT
10	Jesudhas	51	M	43498	-	--	DEBRIDEMENT
11	Kumaran	48	M	47213	+	+	DEBRIDEMENT
12	Murugan	59	M	53421	-	-	DEBRIDEMENT
13	Pandiammal	42	F	56432	+	-	TOE AMPUTATION
14	Saraswathi	38	F	78342	-	-	DEBRIDEMENT
15	Muneeswaran	58	M	54713	-	--	DEBRIDEMENT
16	Venu	65	M	56821	+	+	TRANSMETATARSAL AMPUTATION
17	Pappammal	37	F	58231	-	-	DEBRIDEMENT
18	Pandi	67	M	43672	--	--	DEBRIDEMENT
19	Mariammal	53	F	58953	--	-	DEBRIDEMENT
20	Muthukumar	72	M	57213	+	-	TOE AMPUTATION
21	Raja	35	M	61231	-	+	DEBRIDEMENT
22	Rakkayi	46	F	83114	-	-	DEBRIDEMENT
23	Pitchandi	58	M	67231	-	-	DEBRIDEMENT
24	Vanitha	52	F	27544	-	-	DEBRIDEMENT
25	Madhavan	67	M	70112	+	-	BK AMPUTATION
26	Balakumaran	47	M	79231	-	-	DEBRIDEMENT
27	Pandiselvi	65	F	29466	+	+	TOE AMPUTATION
28	Irulappan	60	M	82331	-	-	DEBRIDEMENT
29	Kumari	64	F	65324	-	-	DEBRIDEMENT
30	Irshad	54	M	67923	-	-	DEBRIDEMENT
31	Raman	57	M	25643	-	-	DEBRIDEMENT
32	Selvi	50	F	78324	-	-	DEBRIDEMENT
33	Sonai	55	M	20452	-	-	DEBRIDEMENT
34	Vani	60	F	68345	+	-	DEBRIDEMENT
35	Kannan	45	M	87562	-	-	DEBRIDEMENT
36	Ambalam	55	M	78452	-	-	DEBRIDEMENT
37	Rajadurai	67	M	67497	-	-	DEBRIDEMENT
38	Balamurugan	43	M	76783	-	-	DEBRIDEMENT
39	rajathi	55	F	58209	-	-	DEBRIDEMENT
40	Balaji	58	M	70958	-	-	DEBRIDEMENT
41	Sadayandi	64	M	87682	-	-	DEBRIDEMENT
42	Sornam	50	F	26986	-	-	DEBRIDEMENT
43	Hazira Beeve	37	F	76572	-	-	SKIN GRAFT
44	Rajkumar	56	M	74422	-	-	DEBRIDEMENT
45	Rajeshwari	45	F	76442	-	-	DEBRIDEMENT
46	Suresh	60	M	37641	-	-	DEBRIDEMENT

47	Mary	42	F	68756	-	-	DEBRIDEMENT
48	Peter	45	M	56231	-	-	DEBRIDEMENT
49	Padmini	50	F	53551	-	+	DEBRIDEMENT
50	Saravanan	58	M	55132	-	-	DEBRIDEMENT
51	Rajesh	35	M	56524	-	-	DEBRIDEMENT
52	Fathima	74	F	62515	+	+	AK AMPUTATION
53	Mohamad Rafiq	39	M	58315	-	-	DEBRIDEMENT
54	Rakku	65	F	58423	+	-	DEBRIDEMENT
55	Asif Ahmed	70	M	50135	--	-	TOE AMPUTATION
56	Padmini	34	F	53551	-	-	DEBRIDEMENT
57	Raja	45	M	57135	-	-	DEBRIDEMENT
58	Subbulaxmi	55	F	58135	-	-	DEBRIDEMENT
59	Kukaravel	59	M	60031	+	+	BK AMPUTATION
60	Anandalaxmi	62	F	61352	-	-	DEBRIDEMENT
61	Padndian	52	M	58832	+	+	DEBRIDEMENT
62	Parameswari	58	F	56235	-	-	DEBRIDEMENT
63	Ganesan	62	M	61239	+	+	TOE AMPUTATION
64	Sasikala	61	F	60351	-	-	DEBRIDEMENT
65	Yasin ahmed	56	M	87652	-	-	DEBRIDEMENT
66	Williams	54	M	65542	+	-	DEBRIDEMENT
67	Anandi	45	F	65322	+	+	BK AMPUTATION
68	Subramani	55	M	86928	-	-	DEBRIDEMENT
69	Manohari	52	F	86543	+	-	DEBRIDEMENT
70	Sree kannan	67	M	86432	-	-	DEBRIDEMENT
71	Manivasagan	57	M	84325	-	-	DEBRIDEMENT
72	Laxmi	46	F	96326	-	-	DEBRIDEMENT
73	Venu Mahalingam	72	M	97642	+	+	DEBRIDEMENT
74	Karuppi	56	F	96542	-	-	DEBRIDEMENT
75	Palpandi	58	M	96532	+	-	TRANSMETATARSAL AMPUTATION
76	Udayakumar	58	M	96422	-	-	DEBRIDEMENT
77	Sankari	49	F	85425	+	+	DEBRIDEMENT
78	Arumugam	62	M	85412	-	-	DEBRIDEMENT
79	Sankaran	64	M	96525	-	-	DEBRIDEMENT
80	Gowri	53	F	84326	-	-	DEBRIDEMENT
81	Ayyakannu	63	m	76523	+	+	DEBRIDEMENT
82	Amirtham	55	F	10392	-	+	BK AMPUTATION
83	Kumaran	63	M	86422	-	-	DEBRIDEMENT
84	Sankari	54	F	86432	-	-	DEBRIDEMENT
85	Marimuthu	64	F	86544	+	+	TOE AMPUTATION
86	Subramani	45	M	72763	-	-	DEBRIDEMENT
87	Aruna	56	F	85422	-	-	DEBRIDEMENT
88	Kumaravel	74	M	78424	+	+	DEBRIDEMENT
89	Meena	52	F	86456	-	-	SKIN GRAFT
90	Arumugam	56	M	86534	-	-	DEBRIDEMENT
91	Pandi	65	M	97652	+	+	DEBRIDEMENT
92	Arasi	53	F	82656	-	-	DEBRIDEMENT
93	Muthu	56	M	96245	+	-	TOE AMPUTATION



94	Mari	56	F	95452	-	-	DEBRIDEMENT
95	Kumar	67	M	95252	+	-	DEBRIDEMENT
96	Prashanth	59	M	82545	-	-	DEBRIDEMENT
97	Rajeswari	47	F	82547	+	+	TOE AMPUTATION
98	Karuppiyah	60	M	86524	-	-	DEBRIDEMENT
99	Rakku	63	F	92546	-	-	DEBRIDEMENT
100	Santhanam	65	M	97523	-	-	DEBRIDEMENT
101	Thiyagu	73	M	92455	+	+	DEBRIDEMENT
102	Rasu	65	M	82548	-	-	DEBRIDEMENT
103	Arasi	43	F	72542	+	+	BK AMPUTATION
104	Udayakumar	58	M	96422	-	-	DEBRIDEMENT
105	Sankari	49	F	85425	+	-	DEBRIDEMENT
106	Arumugam	62	M	85412	-	-	DEBRIDEMENT
107	Sankaran	64	M	96525	-	+	DEBRIDEMENT
108	Gowri	53	F	84326	-	-	DEBRIDEMENT
109	Ayyakannu	63	m	76523	-	-	DEBRIDEMENT
110	Vadivel	71	M	95654	+	-	DEBRIDEMENT
111	Saranya	36	F	86512	-	-	DEBRIDEMENT
112	John	55	M	95276	-	-	DEBRIDEMENT
113	Vedanayagam	63	M	96425	+	+	TOE AMPUTATION
114	Vasanthi	70	F	68754	-	-	DEBRIDEMENT
115	Viruman	45	M	86422	-	-	DEBRIDEMENT
116	Perumathal	52	F	66524	-	-	DEBRIDEMENT
117	Muthupandi	57	M	96526	+	-	TOE AMPUTATION
118	Rani	47	F	68782	-	-	DEBRIDEMENT
119	Sarkkarai	58	M	97562	-	+	DEBRIDEMENT
120	Veerayee	48	F	69862	-	-	DEBRIDEMENT
121	Marimutu	62	M	95421	+	+	AK AMPUTATION
122	Poomayil	45	F	66232	-	-	DEBRIDEMENT
123	Raj	32	M	66342	-	-	DEBRIDEMENT
124	Nisha	38	F	58782	-	-	DEBRIDEMENT
125	Karthikeyan	54	M	90802	+	-	DEBRIDEMENT
126	Vairavan	63	M	70520	-	-	TRANSMETATARSAL AMPUTATION
127	Kanaga	53	F	80527	-	-	DEBRIDEMENT
128	Murugan	58	M	80525	-	-	DEBRIDEMENT
129	Muthumari	64	F	90627	+	-	DEBRIDEMENT
130	Alagarsamy	62	M	78097	+	+	AK AMPUTATION
131	Anbu	49	M	90526	-	-	DEBRIDEMENT
132	Maheswari	53	F	50275	-	-	DEBRIDEMENT
133	Palaniyandi	58	M	89526	-	-	DEBRIDEMENT
134	Sundari	50	F	69202	+	-	TOE AMPUTATION
135	Mohan	60	M	90523	-	-	DEBRIDEMENT
136	Pandian	62	M	80256	+	-	BK AMPUTATION
137	Maritammal	50	F	70267	-	-	DEBRIDEMENT
138	Manohari	52	F	86543	+	-	DEBRIDEMENT
139	Sree kannan	67	M	86432	-	-	SKIN GRAFT
140	Manivasagan	57	M	84325	-	-	DEBRIDEMENT

141	Laxmi	46	F	96326	-	-	DEBRIDEMENT
142	Venu Mahalingam	72	M	97642	+	+	DEBRIDEMENT
143	Karuppi	56	F	96542	-	-	DEBRIDEMENT
144	Mookapillai	62	M	70256	-	-	DEBRIDEMENT
145	Lakshmi	56	F	90267	+	+	AK AMPUTATION
146	Rajasundaram	58	M	96422	-	-	DEBRIDEMENT
147	Sankaramalingam	49	M	85425	+	+	DEBRIDEMENT
148	Arumainayagam	62	M	85412	-	-	DEBRIDEMENT
149	Samson	64	M	96525	-	-	DEBRIDEMENT
150	Gowrishankar	53	M	84326	+	+	DEBRIDEMENT
151	Boominathan	57	M	40257	-	-	DEBRIDEMENT
152	Sundari	54	F	60272	-	-	DEBRIDEMENT
153	Selvakumar	57	M	89272	-	-	DEBRIDEMENT
154	Mallika	48	F	78297	-	-	DEBRIDEMENT
155	Kumaresan	60	M	89251	-	-	DEBRIDEMENT
156	Seethai	48	F	40271	+	-	TOE AMPUTATION
157	Andiyappan	69	M	70182	-	-	DEBRIDEMENT
158	Pasupathy	58	M	72492	-	-	DEBRIDEMENT
159	Pappammal	37	F	58231	-	-	DEBRIDEMENT
160	Pandi	67	M	43672	--	--	DEBRIDEMENT
161	Mariammal	53	F	58953	--	-	DEBRIDEMENT
162	Muthukumar	52	M	57213	+	+	BK AMPUTATION
163	Raja	35	M	61231	-	-	DEBRIDEMENT
164	Rakkayi	46	F	83114	-	-	DEBRIDEMENT
165	Pitchandi	58	M	67231	+	+	DEBRIDEMENT
166	Vanitha	52	F	27544	-	-	DEBRIDEMENT
167	Vasuki	50	F	70281	+	-	DEBRIDEMENT
168	Senniappan	59	M	79021	-	-	DEBRIDEMENT
169	Mudalaiyammal	47	F	50217	-	-	DEBRIDEMENT
170	Subburaj	43	M	89202	-	-	DEBRIDEMENT
171	Latha	56	F	70245	+	+	BK AMPUTATION
172	Chandran	65	M	90256	-	-	DEBRIDEMENT
173	Revathy	73	F	60270	+	+	DEBRIDEMENT
174	Manoharan	53	M	30271	-	-	DEBRIDEMENT
175	Jamuna	54	F	62912	-	-	TOE AMPUTATION
176	Ismail	63	M	72928	-	-	DEBRIDEMENT
177	Kani	45	F	52902	-	+	SKIN GRAFT
178	Praveen	59	M	82652	+	-	DEBRIDEMENT
179	Rukmani	47	F	72078	-	-	DEBRIDEMENT
180	Mahalingam	67	M	26591	+	+	AK AMPUTATION
181	Ramesh	56	M	72921	-	-	DEBRIDEMENT
182	Poongodi	46	F	28038	-	-	DEBRIDEMENT

183	Ravi	39	M	28762	--	-	DEBRIDEMENT
184	Sridurga	56	F	92690	+	-	TOE AMPUTATION
185	Balaji	58	M	70958	-	-	DEBRIDEMENT
186	Sadayandi	64	M	87682	-	+	DEBRIDEMENT
187	Sornam	50	F	26986	-	-	TRANS METATARSAL AMPUTATION
188	Hazira Beeve	37	F	76572	+	-	DEBRIDEMENT

189	Rajkumar	56	M	74422	-	-	DEBRIDEMENT
190	Rajeshwari	45	F	76442	+	-	DEBRIDEMENT
191	Suresh	60	M	37641	-	-	DEBRIDEMENT
192	Subbulaxmi	45	F	82092	-	-	DEBRIDEMENT
193	Shanthi	53	F	91071	-	-	DEBRIDEMENT
194	Ganesan	67	M	27809	-	+	DEBRIDEMENT
195	KarUmayan	56	M	69826	+	+	AK AMPUTATION
196	Saroja	48	F	70922	-	-	DEBRIDEMENT
197	Ayyappan	76	M	99762	+	-	DEBRIDEMENT
198	Tamilselvi	67	F	88521	+	-	DEBRIDEMENT
199	Narayanan	49	M	80972	-	+	DEBRIDEMENT
200	Rakesh	67	M	26987	-	-	DEBRIDEMENT
201	Nafeesa	56	F	80974	--	-	DEBRIDEMENT
202	Pandiarajan	39	M	87562	-	-	DEBRIDEMENT
203	Nagavalli	67	F	80972	+	+	TOE AMPUTATION
204	Marimuthu	72	M	89762	-	-	DEBRIDEMENT
205	Amirtham	53	F	27982	-	-	DEBRIDEMENT
206	Valli	43	F	78622	-	-	DEBRIDEMENT
207	Suresh	58	M	25872	-	-	DEBRIDEMENT
208	Venkatachalam	52	M	28272	+	+	BK AMPUTATION
209	Velumayil	49	F	70982	-	-	DEBRIDEMENT
210	Veeranan	65	M	62982	-	-	DEBRIDEMENT
211	Yasin Banu	45	F	27908	-	-	DEBRIDEMENT
212	Rathinam	67	M	27091	+	-	TRANSMETATARSAL AMPUTATION
213	Pandiyammal	26	F	58261	-	-	DEBRIDEMENT
214	Manickam	56	M	29851	-	-	DEBRIDEMENT
215	Pitchandi	58	M	67231	-	-	SKIN GRAFT
216	Vanitha	52	F	27544	-	-	DEBRIDEMENT
217	Vasuki	50	F	70281	+	-	DEBRIDEMENT
218	Senniappan	59	M	79021	-	+	DEBRIDEMENT
219	Mudalaiyammal	47	F	50217	-	-	DEBRIDEMENT
220	Chandrasekar	65	M	29818	+	+	TOE AMPUTATION
221	Velunatchi	56	F	62987	+	-	AK AMPUTATION
222	Sarkkarai	58	M	97562	-	-	DEBRIDEMENT
223	Veerayee	48	F	69862	-	-	DEBRIDEMENT
224	Marimutu	62	M	95421	+	+	BK AMPUTATION
225	Poomayil	45	F	66232	-	-	DEBRIDEMENT
226	Upili	56	M	72981	-	-	DEBRIDEMENT

227	Balkis	42	F	72982	+	-	DEBRIDEMENT
228	Rajendran	67	M	26981	+	-	DEBRIDEMENT
229	Jemima	52	F	27091	-	+	TOE AMPUTATION
230	Veerappan	56	M	27809	--	-	DEBRIDEMENT
231	Sudhamani	45	F	28092	-	-	DEBRIDEMENT
232	Thalamuthu	45	M	27973	--	-	DEBRIDEMENT
233	Chinnathai	67	F	51978	-	-	DEBRIDEMENT
234	Peter	45	M	56231	-	-	DEBRIDEMENT

235	Nafeesa	56	F	80974	--	-	DEBRIDEMENT
236	Pandiarajan	39	M	87562	-	-	DEBRIDEMENT
237	Nagavalli	67	F	80972	+	+	TOE AMPUTATION
238	Mohan	60	M	90523	-	-	DEBRIDEMENT
239	Pandian	62	M	80256	+	+	BK AMPUTATION
240	Maritammal	50	F	70267	-	-	DEBRIDEMENT
241	Manohari	52	F	86543	+	-	DEBRIDEMENT
242	Sundaram	59	M	43529	-	-	DEBRIDEMENT
243	Murugeswari	54	F	43114	+	-	DEBRIDEMENT
244	Irulandi	62	M	45237	+	+	AK AMPUTATION
245	Murugayee	48	F	67543	-	-	DEBRIDEMENT
246	Jesudhas	51	M	43498	-	--	DEBRIDEMENT
247	Parameswari	58	F	56235	-	-	DEBRIDEMENT
248	Ganesan	62	M	61239	+	+	TOE AMPUTATION
249	Sasikala	61	F	60351	-	-	DEBRIDEMENT
250	Sarkkarai	58	M	97562	-	-	DEBRIDEMENT
251	Rajeshwari	45	F	76442	+	-	DEBRIDEMENT
252	Suresh	60	M	37541	-	-	DEBRIDEMENT
253	Subbulaxmi	45	F	82092	-	-	DEBRIDEMENT
254	Shanthi	37	F	91671	-	-	DEBRIDEMENT
255	Rajathi	56	F	90267	+	-	AK AMPUTATION
256	Rajasundaram	38	M	96422	-	-	DEBRIDEMENT
257	Sankaramalingam	49	M	85478	+	+	DEBRIDEMENT
258	Nisha	38	F	58752	-	-	DEBRIDEMENT
259	Karthikeyan	54	M	90802	+	-	DEBRIDEMENT
260	Vairavarajan	54	M	70580	-	-	TRANSMETATARSAL AMPUTATION
261	Padmini	34	F	53551	-	-	DEBRIDEMENT
262	Rajan	45	M	57135	-	-	DEBRIDEMENT
263	Subbulaxmi	55	F	58135	-	-	DEBRIDEMENT
264	Kumaravelan	59	M	60031	+	+	DEBRIDEMENT
265	Anandalaxmi	62	F	61352	-	-	DEBRIDEMENT

266	Kumaran	48	M	47213	-	-	DEBRIDEMENT
267	Muruganandam	59	M	53421	-	-	DEBRIDEMENT
268	Kulandaiammal	53	F	56432	+	-	TOE AMPUTATION
269	Saraswathiammal	38	F	78342	-	-	DEBRIDEMENT
270	Udayakumar	58	M	96422	-	-	DEBRIDEMENT
271	Sankari	49	F	85425	+	-	DEBRIDEMENT
272	Arumugapandi	62	M	85412	-	-	DEBRIDEMENT
273	Sankaran	64	M	96525	-	-	DEBRIDEMENT
274	Gowri rani	53	F	84326	-	-	DEBRIDEMENT
275	Venkatachalapathy	52	M	28272	-	+	BK AMPUTATION
276	Velumayil	49	F	70982	+	-	DEBRIDEMENT
277	Veeran	65	M	62982	-	-	DEBRIDEMENT
278	Selvakumar	57	M	89272	-	-	DEBRIDEMENT
279	Mallika	48	F	78297	-	-	DEBRIDEMENT
280	Kumaresan	60	M	89251	-	-	SKIN GRAFT
281	Sree kannan	67	M	86432	+	-	DEBRIDEMENT
282	Manivasagan	57	M	84325	-	+	DEBRIDEMENT
283	Rakkammal	63	F	92546	-	-	DEBRIDEMENT
284	Santhanam	65	M	97523	-	-	DEBRIDEMENT
285	Thiyagu	73	M	92455	+	-	DEBRIDEMENT
286	Rasukutty	55	M	82248	-	-	DEBRIDEMENT
287	Mani	57	M	84325	-	-	DEBRIDEMENT
288	John	56	M	26877	-	-	DEBRIDEMENT
289	Laxmi	46	F	96326	-	-	TOE AMPUTATION
290	Venu	72	M	97642	+	-	DEBRIDEMENT
291	Kumaran	63	M	86422	-	-	DEBRIDEMENT
292	Sankari	54	F	86432	-	-	DEBRIDEMENT
293	Mariraja	54	M	86544	+	-	TOE AMPUTATION
294	Subramani	45	M	72763	-	-	DEBRIDEMENT
295	Boominathan	57	M	40257	-	-	DEBRIDEMENT
296	Sundari	54	F	60272	-	-	DEBRIDEMENT
297	Ganesan	67	M	27809	-	+	DEBRIDEMENT
298	Kamaraj	56	M	69826	-	-	BK AMPUTATION
299	Saroja RANI	48	F	70922	-	-	DEBRIDEMENT
300	Ayyappan	76	M	99762	+	-	DEBRIDEMENT
301	Sasikala	61	F	60351	-	-	DEBRIDEMENT
302	Yasin ahmed	56	M	87652	-	-	DEBRIDEMENT
303	Williams	54	M	65542	-	-	DEBRIDEMENT
304	Anandiammal	64	F	65322	+	+	AK AMPUTATION
305	Subramani	55	M	86928	-	-	DEBRIDEMENT
306	Manohari	52	F	86543	+	-	DEBRIDEMENT
307	kannan	67	M	86432	-	+	DEBRIDEMENT
308	Amirtham	53	F	27982	-	-	DEBRIDEMENT
309	Vallithai	43	F	78622	+	-	DEBRIDEMENT
310	Suresh rajan	58	M	25872	-	-	DEBRIDEMENT
311	Udayakumar	58	M	96422	-	-	DEBRIDEMENT
312	Sankari durga	59	F	85425	+	+	TOE AMPUTATION
313	Arumugam	62	M	85412	-	-	DEBRIDEMENT
314	Sankaran	64	M	96525	-	-	DEBRIDEMENT
315	Pappammal	37	F	58231	-	-	DEBRIDEMENT
316	Pandi	67	M	43672	--	--	DEBRIDEMENT
317	Mariammal	53	F	58953	--	-	DEBRIDEMENT
318	Muthusundar	65	M	57213	+	+	BK AMPUTATION
319	Raja rajan	35	M	61231	-	-	DEBRIDEMENT
320	Rakkayi	46	F	83114	-	-	DEBRIDEMENT
321	Rajeshwari	45	F	76442	+	-	DEBRIDEMENT
322	Suresh	60	M	37541	-	-	DEBRIDEMENT
323	Palpandi	58	M	96532	+	+	TOE AMPUTATION

324	Udayakumar	58	M	96422	+	-	DEBRIDEMENT
325	Sankari rakku	49	F	85425	+	+	DEBRIDEMENT
326	Arumugam	62	M	85412	-	-	DEBRIDEMENT
327	Sankaramahalingam	64	M	96525	-	-	DEBRIDEMENT
328	Gowri shankar	53	F	84326	-	+	AK AMPUTATION
329	Rajendran	67	M	26981	+	+	DEBRIDEMENT
330	Jemima rajesh	52	F	27091	-	+	DEBRIDEMENT
331	Veerappa moily	56	M	27809	--	-	DEBRIDEMENT
332	Sudhamani	45	F	28092	-	-	DEBRIDEMENT
333	Thalavai	45	M	27973	--	-	DEBRIDEMENT
334	Chinnathai	67	F	51978	-	-	DEBRIDEMENT
335	Peter Joseph	45	M	56231	-	-	SKIN GRAFT
336	Rajkumar	56	M	74422	-	-	DEBRIDEMENT
337	Rajeshwari	45	F	76442	+	-	DEBRIDEMENT
338	Suresh venkatesh	60	M	37641	-	-	TOE AMPUTATION
339	Subbuthai	45	F	82092	-	-	DEBRIDEMENT
340	Shanthi nirmala	59	F	91071	-	-	DEBRIDEMENT
341	Rajasundaram	58	M	96422	-	-	DEBRIDEMENT
342	Sankara subbu	49	M	85425	+	+	TRANS METATARSAL AMPUTATION
343	Nayagam	62	M	85412	-	-	DEBRIDEMENT
344	Arumugam	56	M	86534	-	-	DEBRIDEMENT
345	Pandi raj	65	M	97652	+	+	DEBRIDEMENT
346	Arasi rajathi	53	F	82656	-	-	DEBRIDEMENT
347	Murugayee	48	F	67543	-	-	DEBRIDEMENT
348	Jesudhas	51	M	43498	-	--	DEBRIDEMENT
349	Parameswari	58	F	56235	-	-	DEBRIDEMENT
350	Christopher	62	M	61239	+	+	TOE AMPUTATION
351	Sasi	61	F	60351	-	-	DEBRIDEMENT
352	Sarkkarai	58	M	97562	-	-	DEBRIDEMENT
353	Rajeshwari	45	F	76442	+	+	DEBRIDEMENT
354	Suresh	60	M	37541	-	-	DEBRIDEMENT
355	Subbulaxmi	45	F	82092	-	-	DEBRIDEMENT
356	Stephie	37	F	91671	-	-	DEBRIDEMENT
357	Fathima	74	F	62515	+	+	AK AMPUTATION
358	Mohamad Rafiq	39	M	58315	-	-	DEBRIDEMENT
359	Rakku	65	F	58423	+	-	DEBRIDEMENT
360	Faiz Ahmed	70	M	50135	--	-	TOE AMPUTATION
361	Padmini	34	F	53551	-	-	DEBRIDEMENT
362	Saravana Raja	45	M	57135	-	-	DEBRIDEMENT
363	Muthulaxmi	55	F	58135	-	-	DEBRIDEMENT
364	Pandi	67	M	43672	--	--	DEBRIDEMENT
365	Mariammal	53	F	58953	--	-	DEBRIDEMENT
366	Lenin	52	M	57213	+	-	BK AMPUTATION
367	Raja	35	M	61231	-	-	SKIN GRAFT
368	Rakkayi	46	F	83114	-	-	DEBRIDEMENT
369	Pitchandi	58	M	67231	-	-	DEBRIDEMENT
370	Vanitha kumari	52	F	27544	-	-	DEBRIDEMENT
371	Vasuki	50	F	70281	+	+	DEBRIDEMENT
372	Senniappan	59	M	79021	-	-	DEBRIDEMENT
373	Raniyammal	47	F	50217	-	-	DEBRIDEMENT
374	Narayanan	49	M	80972	-	-	DEBRIDEMENT
375	Rakesh	67	M	26987	-	-	DEBRIDEMENT
376	Nafeesa	56	F	80974	--	-	TOE AMPUTATION
377	Pandiarajan	39	M	87562	-	-	DEBRIDEMENT
378	Nagasundar	67	F	80972	-	-	DEBRIDEMENT
379	Mariammmal	56	F	95452	-	-	DEBRIDEMENT
380	Kumar	67	M	95252	+	+	DEBRIDEMENT
381	Prashanth	59	M	82545	-	-	DEBRIDEMENT

382	Rajeswari	47	F	82547	-	-	TOE AMPUTATION
383	Karuppiyah	60	M	86524	-	-	DEBRIDEMENT
384	Rakku	63	F	92546	-	-	DEBRIDEMENT
385	Santhanam	65	M	97523	-	+	DEBRIDEMENT
386	Thiyagu	73	M	92455	-	-	DEBRIDEMENT
387	Rasu	65	M	82548	-	-	DEBRIDEMENT
388	Maheswari	43	F	72542	+	+	BK AMPUTATION
389	Udayakumar	58	M	96422	-	-	DEBRIDEMENT
390	Perumal	39	M	92182	-	-	DEBRIDEMENT
391	Kuppammal	71	F	52132	-	-	DEBRIDEMENT
392	Andy	49	M	67694	-	-	DEBRIDEMENT
393	Lakshmi	61	F	51213	+	-	DEBRIDEMENT
394	Periakaruppan	55	M	43441	-	+	BK AMPUTATION
395	Sundaram	59	M	43529	-	-	DEBRIDEMENT
396	Murugeswari	54	F	43114	-	-	DEBRIDEMENT
397	Irulandi	62	M	45237	-	-	DEBRIDEMENT
398	Murugayee	48	F	67543	-	-	DEBRIDEMENT
399	Anandiammal	64	F	65322	-	-	DEBRIDEMENT
400	Subramani	55	M	86928	-	-	DEBRIDEMENT
401	Manohari	52	F	86543	+	-	DEBRIDEMENT
402	Nafiz MOhammed	39	M	62978	-	-	DEBRIDEMENT
403	Velumayil	49	F	70982	-	-	DEBRIDEMENT
404	Veeranan	65	M	62982	-	-	DEBRIDEMENT
405	Yasin Banu	45	F	27908	-	-	DEBRIDEMENT
406	Rathinam Paul	67	M	27091	+	-	TOE AMPUTATION
407	Pandiyammal	26	F	58261	-	-	DEBRIDEMENT
408	Manickam	56	M	29851	-	-	DEBRIDEMENT
409	Pitchandi	58	M	67231	-	-	DEBRIDEMENT
410	Vanitha	52	F	27544	-	-	DEBRIDEMENT
411	Vasuki Devi	50	F	70281	+	+	AK AMPUTATION
412	Mani	57	M	84325	-	-	DEBRIDEMENT
413	John abraham	56	M	26877	-	-	DEBRIDEMENT
414	Laxmi	46	F	96326	-	-	DEBRIDEMENT
415	Venu gopal	72	M	97642	+	-	DEBRIDEMENT
416	Mahalingam	67	M	26591	+	+	AK AMPUTATION
417	Ramesh	56	M	72921	-	-	DEBRIDEMENT
418	Poongodi	46	F	28038	-	-	DEBRIDEMENT
419	Ravi	39	M	28762	--	-	DEBRIDEMENT
420	Sridevi	56	F	92690	+	-	BK AMPUTATION
421	Balaji	58	M	70958	-	-	DEBRIDEMENT
422	Sadayandi	64	M	87682	-	-	DEBRIDEMENT
423	Sornam felicia	50	F	26986	-	-	DEBRIDEMENT
424	Hazira Begum	37	F	76572	-	-	DEBRIDEMENT
425	Venu Mahalingam	72	M	97642	-	+	DEBRIDEMENT
426	Karuppi	56	F	96542	-	-	DEBRIDEMENT
427	Palpandi	58	M	96532	+	-	TRANSMETATARSAL AMPUTATION
428	Udayarani	58	F	96422	-	-	DEBRIDEMENT
429	Thangaraj	49	F	85425	-	-	DEBRIDEMENT
430	Arumugam pandi	62	M	85412	-	-	DEBRIDEMENT
431	Aram	64	M	96525	+	+	DEBRIDEMENT
432	Ghulzar	53	F	84326	-	-	DEBRIDEMENT
433	Ayyakannu	63	m	76523	-	-	TOE AMPUTATION
434	Rakku	63	F	92546	+	+	DEBRIDEMENT
435	Santhanam	65	M	97523	-	-	DEBRIDEMENT
436	Thiyagu	73	M	92455	-	-	DEBRIDEMENT
437	Rasu	65	M	82548	-	-	DEBRIDEMENT
438	Mookammal	43	F	72542	+	+	BK AMPUTATION
439	Udayakumar	58	M	96422	-	-	DEBRIDEMENT

440	Anjalai	49	F	85425	-	-	DEBRIDEMENT
441	Arumugam	62	M	85412	-	-	DEBRIDEMENT
442	Prasad	64	M	96525	-	-	DEBRIDEMENT
443	Shankar	53	F	84326	-	-	DEBRIDEMENT
444	Ayyakannu	63	m	76523	-	-	DEBRIDEMENT
445	Murugan	71	M	95654	+	-	TOE AMPUTATION
446	Sarvesh	54	F	86432	-	-	DEBRIDEMENT
447	Marimuthu	64	F	86544	-	-	DEBRIDEMENT
448	Rajma	45	M	72763	-	-	DEBRIDEMENT
449	Aruna	56	F	85422	-	-	DEBRIDEMENT
450	Kumaravel	74	M	78424	-	-	DEBRIDEMENT
451	Meena	52	F	86456	-	-	DEBRIDEMENT
452	Arumugam	56	M	86534	-	+	DEBRIDEMENT
453	Devi	65	M	97652	-	-	DEBRIDEMENT
454	Arasi	53	F	82656	-	-	DEBRIDEMENT
455	Muthukrishnan	56	M	96245	+	-	TOE AMPUTATION
456	Vivek	53	F	84326	-	-	DEBRIDEMENT
457	Ayyakannu	63	m	76523	-	-	DEBRIDEMENT
458	Palani	71	M	95654	+	-	DEBRIDEMENT
459	Aashik ahmed	56	M	80974	--	-	DEBRIDEMENT
460	Pandiarajan	39	M	87562	-	-	DEBRIDEMENT
461	Nagarajan	67	F	80972	+	+	TOE AMPUTATION
462	Mohan	60	M	90523	-	-	DEBRIDEMENT
463	Pandidurai	62	M	80256	+	+	BK AMPUTATION
464	Maritammal	50	F	70267	-	-	DEBRIDEMENT
465	Manohari	52	F	86543	-	-	DEBRIDEMENT
466	Sundarammal	59	F	43529	-	-	DEBRIDEMENT
467	Murugeshi	54	M	43114	-	-	SKIN GRAFT
468	Rani ammal	47	F	68782	-	-	DEBRIDEMENT
469	Sarkkarai	58	M	97562	-	+	DEBRIDEMENT
470	Veerayee	48	F	69862	-	-	DEBRIDEMENT
471	Kanniraj	62	M	95421	+	-	AK AMPUTATION
472	Poomayil	45	F	66232	-	-	DEBRIDEMENT
473	Raj	32	M	66342	-	-	DEBRIDEMENT
474	Nisha	38	F	58782	-	-	DEBRIDEMENT
475	Karthikeyan	54	M	90802	-	-	DEBRIDEMENT
476	Sivaraj	63	M	70520	-	-	TRANSMETATARSAL AMPUTATION
477	Kanaga	53	F	80527	-	-	DEBRIDEMENT
478	Murugan	58	M	80525	-	-	DEBRIDEMENT
479	Muthumari	34	F	90627	-	-	DEBRIDEMENT
480	Devasenathipathy	62	M	78097	+	+	DEBRIDEMENT
481	Anbu	49	M	90526	-	-	DEBRIDEMENT
482	Maheswari	53	F	50275	-	-	DEBRIDEMENT
483	Palaniyandi	58	M	89526	-	-	DEBRIDEMENT
484	Priyadarshinii	50	F	69202	+	-	TOE AMPUTATION
485	Mohan	60	M	90523	-	-	DEBRIDEMENT
486	Subramani	45	M	72763	-	-	DEBRIDEMENT
487	Aruna	56	F	85422	+	+	DEBRIDEMENT
488	Kumaravel	74	M	78424	-	-	DEBRIDEMENT
489	Meena	52	F	86456	-	-	DEBRIDEMENT
490	Arumugam	56	M	86534	-	-	SKIN GRAFT
491	Rajesh	65	M	97652	+	+	DEBRIDEMENT
492	Arasi	53	F	82656	-	-	DEBRIDEMENT
493	Marirajan	54	M	86544	+	-	TOE AMPUTATION
494	Subramani	45	M	72763	-	-	DEBRIDEMENT
495	Boopathy	57	M	40257	-	-	DEBRIDEMENT
496	Sundari	54	F	60272	-	-	DEBRIDEMENT
497	Ganesan	67	M	27809	-	+	DEBRIDEMENT



498	Karunanidhi	56	M	69826	-	-	BK AMPUTATION
499	Shalini	48	F	70922	-	-	DEBRIDEMENT
500	Ayyappan	76	M	99762	+	-	DEBRIDEMENT
501	Sasikala	61	F	60351	-	-	DEBRIDEMENT
502	Yasin ahmed	56	M	87652	-	-	DEBRIDEMENT
503	Williams	54	M	65542	-	-	DEBRIDEMENT
504	Ananthanarayanan	64	M	65322	+	+	AK AMPUTATION
505	Subramani	55	M	86928	-	-	DEBRIDEMENT
506	Manohari	52	F	86543	+	-	DEBRIDEMENT
507	Sankaran	64	M	96525	-	-	DEBRIDEMENT
508	Gayathri	53	F	84326	-	-	DEBRIDEMENT
509	Ayyakannu	63	m	76523	-	-	DEBRIDEMENT
510	Varun	71	M	95654	+	-	DEBRIDEMENT
511	Balaji	58	M	70958	-	-	DEBRIDEMENT
512	Sadayandi	64	M	87682	-	-	DEBRIDEMENT
513	Mary felicia	50	F	26986	-	+	DEBRIDEMENT
514	Asha Begum	37	F	76572	-	-	DEBRIDEMENT
515	Muneeswaran	58	M	54713	-	--	DEBRIDEMENT
516	Venu	65	M	56821	-	-	DEBRIDEMENT
517	Pappammal	37	F	58231	-	-	DEBRIDEMENT
518	kumaravel	67	M	43672	--	--	DEBRIDEMENT
519	Mariammal	53	F	58953	--	+	DEBRIDEMENT
520	Subash Bose	72	M	57213	+	-	TOE AMPUTATION
521	Raja sambandam	35	M	61231	-	-	DEBRIDEMENT
522	Rakku	46	F	83114	+	+	DEBRIDEMENT
523	Pitchandi	58	M	67231	-	-	DEBRIDEMENT
524	Vanitha kumari	52	F	27544	-	-	DEBRIDEMENT
525	Manmadan	67	M	70112	+	+	BK AMPUTATION
526	Balakumaran	47	M	79231	-	-	DEBRIDEMENT
527	Ponmalar	65	F	29466	-	-	TOE AMPUTATION
528	Irulappan	60	M	82331	-	-	DEBRIDEMENT
529	Kumari	64	F	65324	+	-	DEBRIDEMENT
530	Irshad	54	M	67923	-	-	DEBRIDEMENT
531	Raman	57	M	25643	-	-	DEBRIDEMENT
532	Selvi	50	F	78324	-	-	DEBRIDEMENT
533	Sonai Muthu	55	M	20452	+	+	AK AMPUTATION
534	Vani	60	F	68345	+	-	DEBRIDEMENT
535	Kannan	45	M	87562	-	-	DEBRIDEMENT
536	Ambalavanan	55	M	78452	-	-	DEBRIDEMENT
537	Rajadurai	67	M	67497	-	-	DEBRIDEMENT
538	Balamurugan	43	M	76783	-	-	DEBRIDEMENT
539	Parvathi	55	F	58209	+	+	DEBRIDEMENT
540	Balaji nathan	58	M	70958	-	-	DEBRIDEMENT
541	Meena	52	F	86543	-	-	DEBRIDEMENT
542	Sundaram	59	M	43529	-	-	SKIN GRAFT
543	Murugeswari	54	F	43114	-	-	DEBRIDEMENT
544	Iyengaran	62	M	45237	+	+	AK AMPUTATION
545	Murugayee	48	F	67543	-	-	DEBRIDEMENT
546	Jesudhas	51	M	43498	-	--	DEBRIDEMENT
547	Parameswari	58	F	56235	-	-	DEBRIDEMENT
548	Gandhimathi	62	F	61239	+	+	TOE AMPUTATION
549	Sasikala	61	F	60351	-	-	DEBRIDEMENT
550	Sarkkarai	58	M	97552	-	-	DEBRIDEMENT
551	Rajeshwari	45	F	76442	-	-	DEBRIDEMENT
552	Suresh	60	M	37541	-	-	DEBRIDEMENT
553	Sumathi	45	F	82092	-	-	DEBRIDEMENT
554	Simirna	37	F	91671	-	+	DEBRIDEMENT
555	Kumaresan	60	M	89251	-	-	DEBRIDEMENT

556	Seethai ammal	48	F	40271	+	-	TOE AMPUTATION
557	Andiyappan	69	M	70182	-	-	DEBRIDEMENT
558	Pasupathy	58	M	72492	-	-	DEBRIDEMENT
559	Pappammal	37	F	58231	-	-	DEBRIDEMENT
560	Pandi	67	M	43672	--	--	DEBRIDEMENT
561	Mariammal	53	F	58953	--	-	DEBRIDEMENT
562	Maruthupandian	52	M	57213	+	+	BK AMPUTATION
563	Raj	35	M	61231	-	-	DEBRIDEMENT
564	Rakkayi	46	F	83114	-	-	DEBRIDEMENT
565	Pitchayappan	58	M	67231	-	-	DEBRIDEMENT
566	Vidyasagar	75	M	43655	-	-	BK AMPUTATION
567	Sankaravathi	49	F	85425	-	-	DEBRIDEMENT
568	Amalan	62	M	85412	-	-	DEBRIDEMENT
569	Sankaran	64	M	96525	-	+	DEBRIDEMENT
570	Grace	53	F	84326	+	-	DEBRIDEMENT
571	Saranya	36	F	86512	-	-	DEBRIDEMENT
572	John Santosh	55	M	95276	-	-	DEBRIDEMENT
573	Veda	63	F	96425	+	+	TOE AMPUTATION
574	Vasanthi	70	F	68754	-	-	DEBRIDEMENT
575	Viruman	45	M	86422	-	-	DEBRIDEMENT
576	Perumathal	52	F	66524	-	+	DEBRIDEMENT
577	Gopinath	57	M	96526	+	-	TOE AMPUTATION
578	Rani	47	F	68782	-	-	DEBRIDEMENT
579	Subbu	58	M	97562	+	+	DEBRIDEMENT
580	Veerayee	48	F	69862	-	-	DEBRIDEMENT
581	Sasikala	61	F	60351	-	-	DEBRIDEMENT
582	Sarkkarai	58	M	97562	-	-	DEBRIDEMENT
583	Rajesh	45	M	76442	+	-	DEBRIDEMENT
584	Suresh	60	M	37541	+	+	DEBRIDEMENT
585	Subbuthai	45	F	82092	-	-	DEBRIDEMENT
586	Stephen	37	M	91671	-	-	DEBRIDEMENT
587	Farooq abdulla	74	F	62515	+	+	AK AMPUTATION
588	Mohamad Yusuf	39	M	58315	-	+	DEBRIDEMENT
589	Rita	65	F	58423	-	-	DEBRIDEMENT
590	Fertoze Ahmed	70	M	50135	--	-	TOE AMPUTATION
591	Padmini	34	F	53551	-	-	DEBRIDEMENT
592	Saravana Raja	45	M	57135	-	-	DEBRIDEMENT
593	Muthulaxmi	55	F	58135	-	+	DEBRIDEMENT
594	Purushothaman	67	M	43672	+	--	DEBRIDEMENT
595	Venkat	52	M	28272	+	+	BK AMPUTATION
596	Valli	49	F	70982	-	-	DEBRIDEMENT
597	Veeran	65	M	62982	-	-	DEBRIDEMENT
598	Selvakumar	57	M	89272	+	-	DEBRIDEMENT
599	Mallika ambika	48	F	78297	-	+	DEBRIDEMENT
600	Kumaresan	60	M	89251	-	+	DEBRIDEMENT
601	Sree rajan	67	M	86432	+	-	DEBRIDEMENT
602	Manivasagan	57	M	84325	-	-	SKIN GRAFT
603	Rakkammal	63	F	92546	-	-	DEBRIDEMENT
604	Santhanam	65	M	97523	-	-	DEBRIDEMENT
605	Thiyagaraj	73	M	92455	+	-	DEBRIDEMENT
606	Rasukutty	55	M	82248	-	+	DEBRIDEMENT
607	Maniratnam	57	M	84325	-	-	DEBRIDEMENT
608	Pasupathy	58	M	72492	-	-	DEBRIDEMENT
609	Pappathy	37	F	58231	-	-	DEBRIDEMENT
610	Parthiban	67	M	43672	--	+	DEBRIDEMENT
611	Mariammal	53	F	58953	+	-	DEBRIDEMENT
612	Muthukumar	52	M	57213	+	+	BK AMPUTATION
613	Rasukutty	35	M	61231	-	-	DEBRIDEMENT

614	Rakkayi	46	F	83114	-	-	DEBRIDEMENT
615	Pugalendi	58	M	67231	-	-	DEBRIDEMENT
616	Vanitha	52	F	27544	-	-	DEBRIDEMENT
617	Varshita	50	F	70281	+	-	DEBRIDEMENT
618	Senniappan	59	M	79021	-	-	DEBRIDEMENT
619	Karthikeyan	54	M	90802	-	-	DEBRIDEMENT
620	Visvanathan	54	M	70580	-	+	TRANSMETATARSAL AMPUTATION
621	Padmini	34	F	53551	-	-	DEBRIDEMENT
622	Radish	45	M	57135	-	+	DEBRIDEMENT
623	Subbulaxmi	55	F	58135	-	-	DEBRIDEMENT
624	Karthikeyan	45	M	52902	-	-	DEBRIDEMENT
625	Praveen	59	M	82652	+	-	DEBRIDEMENT
626	Upli	56	M	72981	-	+	DEBRIDEMENT
627	Balkis fathima	42	F	72982	-	-	DEBRIDEMENT
628	Rajendran	67	M	26981	+	-	DEBRIDEMENT
629	Janet	54	F	27091	-	+	TOE AMPUTATION
630	Veerappamoily	56	M	27809	+	-	DEBRIDEMENT
631	Sudhamani	45	F	28092	-	-	DEBRIDEMENT
632	Thalamuthu	45	M	27973	--	-	DEBRIDEMENT
633	Chinnathai	67	F	51978	-	-	SKIN GRAFT
634	Pethuru	45	M	56231	-	-	DEBRIDEMENT
635	Mohan kumar	60	M	90523	-	-	DEBRIDEMENT
636	Parameswaran	62	M	80256	-	-	BK AMPUTATION
637	Mariammal	50	F	70267	-	+	DEBRIDEMENT
638	Mangalam	52	F	86543	+	-	DEBRIDEMENT
639	Santhakumar	67	M	86432	-	-	DEBRIDEMENT
640	Manivasagan	57	M	84325	-	-	DEBRIDEMENT
641	Rajasundari	58	F	96422	-	-	DEBRIDEMENT
642	Sunil	49	M	85425	+	+	TRANS METATARSAL AMPUTATION
643	Nayagl	62	F	85412	-	-	DEBRIDEMENT
644	Arumugam	56	M	86534	-	-	DEBRIDEMENT
645	Pandi raj	65	M	97652	-	+	DEBRIDEMENT
646	Thilagavathi	53	F	82656	-	-	DEBRIDEMENT
647	Mark	42	M	68756	-	-	DEBRIDEMENT
648	Peter	45	M	56231	+	-	DEBRIDEMENT
649	Padmini	50	F	53551	-	-	DEBRIDEMENT
650	Saravanan	58	M	55132	+	-	DEBRIDEMENT
651	Rajesh kannan	35	M	56524	-	-	DEBRIDEMENT
652	Buvaneshwari	45	F	76442	+	-	DEBRIDEMENT
653	Suriyakumar	60	M	37541	-	-	DEBRIDEMENT
654	Mallika	48	F	78297	-	-	DEBRIDEMENT
655	Kumaresan	60	M	89251	-	-	DEBRIDEMENT
656	Seetharaman	48	M	40271	+	-	TOE AMPUTATION
657	Andiyappan	69	M	70182	-	-	DEBRIDEMENT
658	Pasupathy	58	M	72492	-	-	DEBRIDEMENT
659	Pappal	37	F	58231	-	-	DEBRIDEMENT
660	Pandi	67	M	43672	--	+	DEBRIDEMENT
661	Mariammal	53	F	58953	--	-	DEBRIDEMENT
662	Ravindar	51	M	57233	+	+	BK AMPUTATION
663	Rajan santhosam	35	M	61231	-	-	DEBRIDEMENT
664	Rakkayi	46	F	83114	-	-	DEBRIDEMENT
665	Pitchandi	58	M	67231	-	-	DEBRIDEMENT
666	Vanitha	52	F	27544	-	-	DEBRIDEMENT
667	Veluthai	50	F	70281	+	+	DEBRIDEMENT
668	Sudith	59	M	79021	-	-	DEBRIDEMENT
669	Mudalaiyammal	47	F	50217	-	-	DEBRIDEMENT
670	Balan	43	M	89202	-	-	DEBRIDEMENT
671	Selvan	49	F	85425	+	-	DEBRIDEMENT

672	Arumugapandi	62	M	85412	-	-	DEBRIDEMENT
673	Sankaran	64	M	96525	-	-	DEBRIDEMENT
674	Girinath	53	M	84326	-	+	DEBRIDEMENT
675	Jalathambal	54	F	62912	-	-	TOE AMPUTATION
676	Israel	63	M	72928	-	-	DEBRIDEMENT
677	Kavitha	45	F	52902	-	-	DEBRIDEMENT
678	Praveen	59	M	82652	+	-	DEBRIDEMENT
679	Rukmani devi	47	F	72078	-	-	DEBRIDEMENT
680	Rakkammal	63	F	92546	-	-	DEBRIDEMENT
681	Santhanam	65	M	97523	-	-	AK AMPUTATION
682	Thomas	46	M	23455	-	-	DEBRIDEMENT
683	Kumaran	63	M	86422	-	-	DEBRIDEMENT
684	Kalaiarasi	54	F	86432	-	-	DEBRIDEMENT
685	Masoodh basha	64	M	86544	+	-	TOE AMPUTATION
686	Subramani	45	M	72763	-	-	DEBRIDEMENT
687	Arun	56	M	85422	-	-	DEBRIDEMENT
688	Kumaravel	74	M	78424	+	+	DEBRIDEMENT
689	Meenakshi	52	F	86456	-	-	DEBRIDEMENT
690	Arumugam	56	M	86534	-	+	DEBRIDEMENT
691	Vinoth	52	M	28272	-	+	BK AMPUTATION
692	Velumayil	49	F	70982	-	-	DEBRIDEMENT
693	Veerasenan	65	M	62982	-	-	DEBRIDEMENT
694	Periakaruppan	55	M	43441	-	+	BK AMPUTATION
695	Sundaram	59	M	43529	-	-	DEBRIDEMENT
696	Mookammal	54	F	43114	+	-	DEBRIDEMENT
697	Irulandi	62	M	45237	-	-	DEBRIDEMENT
698	Mary	48	F	67543	-	-	DEBRIDEMENT
699	Anandiammal	64	F	65322	+	-	DEBRIDEMENT
700	Sukumar	55	M	86928	-	-	DEBRIDEMENT
701	Hariharan	52	F	86543	+	-	DEBRIDEMENT
702	Nafiz Mohammed	39	M	62978	-	-	DEBRIDEMENT
703	Andy	49	M	67694	-	-	DEBRIDEMENT
704	Lakshmi	61	F	51213	-	-	DEBRIDEMENT
705	Periakaruppan	55	M	43441	-	+	TOE AMPUTATION
706	Sundarammal	59	F	43529	-	-	DEBRIDEMENT
707	kannan	67	M	86432	+	-	DEBRIDEMENT
708	Amirtham	53	F	27982	-	-	DEBRIDEMENT
709	Vallithai	43	F	78622	-	-	DEBRIDEMENT
710	Prem rajan	58	M	25872	-	-	SKIN GRAFT
711	Udayakumar	58	M	96422	-	-	DEBRIDEMENT
712	Murugayee	48	F	67543	-	-	DEBRIDEMENT
713	Jesudhas	51	M	43498	-	--	DEBRIDEMENT
714	Pari	58	M	56235	-	-	DEBRIDEMENT
715	Christopher	62	M	61239	+	+	DEBRIDEMENT
716	Esther	61	F	60351	-	+	DEBRIDEMENT
717	Sarkkarai thevar	58	M	97562	-	-	DEBRIDEMENT
718	kumaravel	67	M	43672	--	--	DEBRIDEMENT
719	Malar	53	F	58953	--	-	DEBRIDEMENT
720	Subash Bose	72	M	57213	+	-	DEBRIDEMENT
721	Raja sambandam	35	M	61231	-	-	DEBRIDEMENT
722	Ranjini	46	F	83114	-	-	DEBRIDEMENT
723	Prem	58	M	67231	-	+	DEBRIDEMENT
724	Vanitha kumari	52	F	27544	+	-	DEBRIDEMENT
725	Manamalli	67	F	70112	+	-	AK AMPUTATION
726	Balakumaran	47	M	79231	-	-	DEBRIDEMENT
727	Ponmurugan	65	M	29466	-	-	TOE AMPUTATION
728	Selvakumar	57	M	89272	-	-	DEBRIDEMENT
729	Mallika	48	F	78297	-	-	DEBRIDEMENT

730	Kumaresan	60	M	89251	-	-	DEBRIDEMENT
731	kannan	67	M	86432	-	-	DEBRIDEMENT
732	Manivasagan	57	M	84325	-	-	DEBRIDEMENT
733	Rakkammal	63	F	92546	+	+	DEBRIDEMENT
734	Santhanakannan	65	M	97523	-	-	DEBRIDEMENT
735	Thiyagu	73	M	92455	+	-	DEBRIDEMENT
736	Rasukutty	55	M	82248	-	-	DEBRIDEMENT
737	Mani shankar	57	M	84325	-	+	DEBRIDEMENT
738	Jason	56	M	26877	-	-	DEBRIDEMENT
739	Veerappa moily	56	M	27809	--	-	DEBRIDEMENT
740	Sudarmani	45	F	28092	-	-	DEBRIDEMENT
741	Thilagar	45	M	27973	+	-	DEBRIDEMENT
742	Chinthamani	67	F	51978	-	+	DEBRIDEMENT
743	Karuppi natchiar	56	F	96542	-	-	DEBRIDEMENT
744	Mookapillai	62	M	70256	-	-	DEBRIDEMENT
745	Lakshmi narayanan	56	M	90267	+	-	AK AMPUTATION
746	Sundaram	58	M	96422	-	-	DEBRIDEMENT
747	Narayanan	49	M	80972	-	-	DEBRIDEMENT
748	Rakesh	67	M	26987	-	-	DEBRIDEMENT
749	Nayeem	56	F	80974	--	+	DEBRIDEMENT
750	Akilandeshwari	39	F	87562	+	-	DEBRIDEMENT
751	Nagasundari	67	F	80972	-	-	DEBRIDEMENT
752	Mariraja	54	M	86544	+	-	TOE AMPUTATION
753	Subramani	45	M	72763	-	-	DEBRIDEMENT
754	Boominathan	57	M	40257	-	-	DEBRIDEMENT
755	Tahsin	54	F	60272	-	-	DEBRIDEMENT
756	Ganesan	67	M	27809	-	+	DEBRIDEMENT
757	Kamesh	56	M	69826	-	-	BK AMPUTATION
758	Saroja	48	F	70922	-	-	DEBRIDEMENT
759	Ayyappan	76	M	99762	+	-	DEBRIDEMENT
760	Aravind	56	M	80974	+	+	DEBRIDEMENT
761	Williams	39	M	87562	-	-	DEBRIDEMENT
762	Natesan	67	F	80972	+	+	TOE AMPUTATION
763	Mokkaisami	60	M	90523	-	-	DEBRIDEMENT
764	Krishnan	59	M	60031	+	+	DEBRIDEMENT
765	Anandalaxmi	62	F	61352	-	-	DEBRIDEMENT
766	Uma	48	F	47213	-	-	DEBRIDEMENT
767	Muruganandam	59	M	53421	+	-	DEBRIDEMENT
768	Deepal	53	F	56432	+	-	TOE AMPUTATION
769	Saraswathiammal	38	F	78342	-	-	DEBRIDEMENT
770	Priya	55	F	43441	-	+	BK AMPUTATION
771	Sundaram	59	M	43529	-	-	DEBRIDEMENT
772	Madasami	54	F	43114	-	-	DEBRIDEMENT
773	Irulandi	62	M	45237	-	-	DEBRIDEMENT
774	Merlin	48	F	67543	-	-	DEBRIDEMENT
775	Laxmi	46	F	96326	-	-	SKIN GRAFT
776	Venu Mahalingam	72	M	97642	+	+	DEBRIDEMENT
777	Karuppi	56	F	96542	-	-	DEBRIDEMENT
778	Palpandi	58	M	96532	+	-	TRANSMETATARSAL AMPUTATION
779	Udayakumar	58	M	96422	-	-	DEBRIDEMENT
780	Ravi shankar	49	M	85425	+	+	DEBRIDEMENT
781	Arumugam	62	M	85412	-	-	DEBRIDEMENT
782	Umayal	64	F	96525	-	-	DEBRIDEMENT
783	Gowri	53	F	84326	-	-	DEBRIDEMENT
784	Ayyakannu	63	m	76523	-	-	DEBRIDEMENT
785	Dhanasekhar	57	M	89272	-	-	DEBRIDEMENT
786	Mallika	48	F	78297	-	-	DEBRIDEMENT
787	Kumaresan	60	M	89251	-	-	DEBRIDEMENT

788	Seethaiammal	48	F	40271	+	+	BK AMPUTATION
789	Andiyappan	69	M	70182	-	-	DEBRIDEMENT
790	Parasuram	58	M	72492	-	-	DEBRIDEMENT
791	Sadayandi	64	M	87682	-	-	DEBRIDEMENT
792	Felicia	50	F	26986	-	-	DEBRIDEMENT
793	Jennath Begum	37	F	76572	+	+	DEBRIDEMENT
794	Venu srinivasan	72	M	97642	-	-	DEBRIDEMENT
795	Maheswari	43	F	72542	+	+	TOE AMPUTATION
796	Udayakumar	58	M	96422	-	-	DEBRIDEMENT
797	Perumal	39	M	92182	-	-	DEBRIDEMENT
798	Kuppammal	71	F	52132	+	-	DEBRIDEMENT
799	Andy	49	M	67694	-	+	DEBRIDEMENT
800	Lakshmi	61	F	51213	+	-	DEBRIDEMENT
801	Periakka	55	F	43441	-	+	BK AMPUTATION
802	Sigappi	59	M	43529	-	-	DEBRIDEMENT
803	Paraman	54	M	43114	-	-	DEBRIDEMENT
804	Irulandi	62	M	45237	-	-	DEBRIDEMENT
805	Yamuna	48	F	67543	-	-	DEBRIDEMENT
806	Anandiammal	64	F	65322	-	-	DEBRIDEMENT
807	Solomon	55	M	86928	-	-	DEBRIDEMENT
808	Rasu	67	M	67497	-	+	DEBRIDEMENT
809	Balamurugan	43	M	76783	-	-	DEBRIDEMENT
810	Parvathi	55	F	58209	-	-	DEBRIDEMENT
811	Bala	58	M	70958	-	-	DEBRIDEMENT
812	Meenakumari	52	F	86543	-	-	DEBRIDEMENT
813	Pandiyammal	26	F	58261	+	+	DEBRIDEMENT
814	Manickam	56	M	29851	-	-	DEBRIDEMENT
815	Pitchandi	58	M	67231	-	-	SKIN GRAFT
816	Vanitha	52	F	27544	-	-	DEBRIDEMENT
817	Vasuki	50	F	70281	+	-	DEBRIDEMENT
818	Servai	59	M	79021	-	-	DEBRIDEMENT
819	Mudalaiyammal	47	F	50217	-	-	DEBRIDEMENT
820	Chokkan	65	M	29818	+	+	TOE AMPUTATION
821	Velunatchi	56	F	62987	+	-	AK AMPUTATION
822	Sonai	58	M	97562	-	-	DEBRIDEMENT
823	Veerayee	48	F	69862	-	-	DEBRIDEMENT
824	Malar	62	F	95421	+	-	BK AMPUTATION
825	Poomayil	45	F	66232	-	-	DEBRIDEMENT
826	Upili thevar	56	M	72981	-	-	DEBRIDEMENT
827	Banu	42	F	72982	-	-	DEBRIDEMENT
828	Rajendran	67	M	26981	+	-	DEBRIDEMENT
829	Janet	52	F	27091	-	+	TOE AMPUTATION
830	Veerappan	56	M	27809	--	-	DEBRIDEMENT
831	Sudha	45	F	28092	-	-	DEBRIDEMENT
832	Thalamuthu	45	M	27973	--	-	DEBRIDEMENT
833	Chinnathai	67	F	51978	-	-	DEBRIDEMENT
834	Valli	60	F	68345	+	+	DEBRIDEMENT
835	Kannan	45	M	87562	-	-	DEBRIDEMENT
836	Ambika	55	F	78452	-	-	DEBRIDEMENT
837	Rajadurai	67	M	67497	-	-	DEBRIDEMENT
838	Brinda	43	F	76783	-	-	DEBRIDEMENT
839	rajathi	55	F	58209	-	-	DEBRIDEMENT
840	Balaji	58	M	70958	-	-	DEBRIDEMENT
881	Sadayandi	64	M	87682	-	-	DEBRIDEMENT
842	Seeniyammal	50	F	26986	+	+	BK AMPUTATION
843	Hazira Beevi	37	F	76572	+	-	DEBRIDEMENT
844	Rajkumar	56	M	74422	-	-	DEBRIDEMENT
845	Rajula	45	F	76442	-	-	DEBRIDEMENT

846	Sarada	48	F	70922	-	-	DEBRIDEMENT
847	Ayyavu	76	M	99762	+	-	DEBRIDEMENT
848	Tamilarasan	67	M	88521	-	-	DEBRIDEMENT
849	Narayanamurthy	49	M	80972	-	+	DEBRIDEMENT
850	Saravanan	58	M	55132	+	-	DEBRIDEMENT
851	Rajesh	35	M	56524	-	-	DEBRIDEMENT
852	Fathima nasreen	74	F	62515	+	+	AK AMPUTATION
853	Mohamad Akbar	39	M	58315	-	-	DEBRIDEMENT
854	Rakku	65	F	58423	+	-	DEBRIDEMENT
855	Khader Ahmed	70	M	50135	--	-	TOE AMPUTATION
856	Padmini	34	F	53551	-	-	DEBRIDEMENT
857	Raja	45	M	57135	+	-	DEBRIDEMENT
858	Kulandai	55	F	58135	-	+	DEBRIDEMENT
859	Krithika	59	F	60031	-	-	DEBRIDEMENT
860	Anand	62	F	61352	-	-	DEBRIDEMENT
861	Panneerselvam	52	M	58832	-	-	DEBRIDEMENT
862	Parameswari	58	F	56235	-	+	DEBRIDEMENT
863	Gopal	62	M	61239	+	+	TOE AMPUTATION
864	Shantha	61	F	60351	-	-	DEBRIDEMENT
865	Yasin banu	56	F	87652	-	-	DEBRIDEMENT
866	Boopathy	54	M	65542	-	-	SKIN GRAFT
867	Anandi	45	F	65322	-	-	BK AMPUTATION
868	Sangumani	55	M	86928	-	-	DEBRIDEMENT
869	Muthammal	52	F	86543	+	-	DEBRIDEMENT
870	Sreekumaran	67	M	86432	-	-	DEBRIDEMENT
871	Manivasagan	57	M	84325	-	+	DEBRIDEMENT
872	Laxmi	46	F	96326	-	-	DEBRIDEMENT
873	Venuprabakar	72	M	97642	-	-	DEBRIDEMENT
874	Karuppi	56	F	96542	-	-	DEBRIDEMENT
875	Palpandi	58	M	96532	+	-	TRANSMETATARSAL AMPUTATION
876	Udayakumar	58	M	96422	-	-	DEBRIDEMENT
877	Indra	49	F	85425	+	-	DEBRIDEMENT
878	Selvaragavan	57	M	89272	-	-	DEBRIDEMENT
879	Manimegalai	48	F	78297	-	-	DEBRIDEMENT
880	Kumar	60	M	89251	-	+	DEBRIDEMENT
881	Suriyakumar	67	M	86432	-	-	DEBRIDEMENT
882	Manivasagan	57	M	84325	-	-	DEBRIDEMENT
883	Rakkammal	63	F	92546	-	-	SKIN GRAFT
884	Sonai	65	M	97523	-	-	DEBRIDEMENT
885	Thirumal	73	M	92455	+	-	DEBRIDEMENT
886	Ramesh	55	M	82248	-	-	DEBRIDEMENT
887	Manikandan	57	M	84325	+	+	AK AMPUTATION
888	Palani	74	M	78424	-	-	DEBRIDEMENT
889	Meena	52	F	86456	-	-	DEBRIDEMENT
890	Velu	56	M	86534	-	-	DEBRIDEMENT
891	Rajesh	65	M	97652	-	+	DEBRIDEMENT
892	Mangayarkarasii	53	F	82656	-	-	DEBRIDEMENT
893	Marirajan	54	M	86544	+	-	TOE AMPUTATION
894	Ramachandran	45	M	72763	-	+	DEBRIDEMENT
895	Sundaram	59	M	43529	-	-	DEBRIDEMENT
896	Maruthayee	54	F	43114	-	-	DEBRIDEMENT
897	Irulappan	62	M	45237	-	-	DEBRIDEMENT
898	Mary	48	F	67543	-	-	DEBRIDEMENT
899	Ulaganayagi	64	F	65322	-	-	DEBRIDEMENT
900	Sudharshan	55	M	86928	-	-	DEBRIDEMENT
901	Hariharan	52	F	86543	+	+	DEBRIDEMENT
902	Akbar	39	M	62978	-	-	DEBRIDEMENT
903	Nagavalli	67	F	80972	+	+	TRANS METATARSAL AMPUTATION



904	Mohanram	60	M	90523	-	-	DEBRIDEMENT
905	Punitha	62	F	80256	+	-	BK AMPUTATION
906	Vallithai	43	F	78622	-	-	DEBRIDEMENT
907	Suresh krishna	58	M	25872	-	-	DEBRIDEMENT
908	Venkatachalapathy	52	M	28272	-	+	BK AMPUTATION
909	Velumayil	49	F	70982	-	-	DEBRIDEMENT
910	Vijayan	65	M	62982	-	-	DEBRIDEMENT
911	Yasin	45	F	27908	-	-	DEBRIDEMENT
912	Rathi	67	F	27091	+	-	TRANSMETATARSAL AMPUTATION
913	Pandiyammal	26	F	58261	-	-	DEBRIDEMENT
914	Manickam	56	M	29851	-	-	DEBRIDEMENT
915	Petchi	58	F	67231	-	-	DEBRIDEMENT
916	Vanitha	52	F	27544	-	+	DEBRIDEMENT
917	Varshini	50	F	70281	+	-	DEBRIDEMENT
918	Sudalai	59	M	79021	+	-	DEBRIDEMENT
919	Meenakshi	47	F	50217	-	-	DEBRIDEMENT
920	Chandrasekar	65	M	29818	+	+	TOE AMPUTATION
921	Veerayee	56	F	62987	+	-	AK AMPUTATION
922	Sarkkarai	58	M	97562	-	-	DEBRIDEMENT
923	Vembuli	48	M	69862	-	-	DEBRIDEMENT
924	Alagu	62	M	95421	+	-	BK AMPUTATION
925	Poomayil	45	F	66232	-	-	DEBRIDEMENT
926	Gandhimathi	56	F	96542	+	-	DEBRIDEMENT
927	Perumal	58	M	96532	+	-	TRANSMETATARSAL AMPUTATION
928	Udayarani	58	F	96422	-	-	DEBRIDEMENT
929	Thangaraj	49	F	85425	-	+	DEBRIDEMENT
930	Alagammal	62	F	85412	-	-	DEBRIDEMENT
931	Alagu	64	M	96525	-	-	DEBRIDEMENT
932	Ghulzar	53	F	84326	-	-	DEBRIDEMENT
933	Poongothai	63	m	76523	-	-	DEBRIDEMENT
934	Roopa	63	F	92546	-	-	DEBRIDEMENT
935	Santhanam	65	M	97523	-	+	DEBRIDEMENT
936	Thayumanavan	73	M	92455	-	-	DEBRIDEMENT
937	Chellapandi	65	M	82548	-	-	DEBRIDEMENT
938	Mookammal	43	F	72542	+	+	BK AMPUTATION
939	Udayakumar	58	M	96422	-	-	DEBRIDEMENT
940	Amala	49	F	85425	-	-	DEBRIDEMENT
941	Arumugam	62	M	85412	-	+	DEBRIDEMENT
942	Prasad	64	M	96525	-	-	DEBRIDEMENT
943	Shankar	53	F	84326	-	-	DEBRIDEMENT
944	James	63	m	76523	-	-	DEBRIDEMENT
945	Muniyandi	48	F	67543	-	-	DEBRIDEMENT
946	Jesudhas	51	M	43498	-	--	DEBRIDEMENT
947	Parameswari	58	F	56235	-	-	DEBRIDEMENT
948	Ganesh	62	F	61239	+	+	TOE AMPUTATION
949	Sasi	61	F	60351	-	-	DEBRIDEMENT
950	Karthi	58	M	97552	-	-	DEBRIDEMENT
951	Rajeshwari	45	F	76442	-	+	DEBRIDEMENT
952	Suresh	60	M	37541	-	-	DEBRIDEMENT
953	Lenin	45	M	82092	-	-	DEBRIDEMENT
954	Singari	37	F	91671	-	-	DEBRIDEMENT
955	Kumaresan	60	M	89251	-	-	DEBRIDEMENT
956	Seethai ammal	48	F	40271	+	-	AK AMPUTATION
957	Andithevar	69	M	70182	-	-	DEBRIDEMENT
958	kannan	67	M	86432	-	-	DEBRIDEMENT
959	Amirtham	53	F	27982	-	-	DEBRIDEMENT
960	Vallithai	43	F	78622	-	-	DEBRIDEMENT



961	Padmini	34	F	53551	+	-	DEBRIDEMENT
962	Rajan	45	M	57135	-	-	DEBRIDEMENT
963	Subbulaxmi	55	F	58135	-	-	DEBRIDEMENT
964	Karthik	59	M	60031	+	+	AK AMPUTATION
965	Anandalaxmi	62	F	61352	-	-	DEBRIDEMENT
966	Kumaran	48	M	47213	-	-	DEBRIDEMENT
967	Muruganandam	59	M	53421	-	-	DEBRIDEMENT
968	Kulandaiammal	53	F	56432	+	-	TOE AMPUTATION
969	Sarasu	38	F	78342	-	-	DEBRIDEMENT
970	Udayakumar	58	M	96422	-	-	DEBRIDEMENT
971	Savithri	49	F	85425	+	-	DEBRIDEMENT
972	Arumugapandi	62	M	85412	-	+	DEBRIDEMENT
973	Alagumani	64	M	96525	-	-	DEBRIDEMENT
974	Gayathri	53	F	84326	-	+	DEBRIDEMENT
975	Venkatachalapathy	52	M	28272	-	+	BK AMPUTATION
976	Velumayil	49	F	70982	-	-	DEBRIDEMENT
977	Varun	65	M	62982	-	-	DEBRIDEMENT
978	Selvakumar	57	M	89272	-	-	DEBRIDEMENT
979	Maneka	48	F	78297	-	-	DEBRIDEMENT
980	Madasamy	60	M	89251	-	-	DEBRIDEMENT
981	Subbu	67	M	86432	-	-	DEBRIDEMENT
982	Manivasagan	57	M	84325	-	-	SKIN GRAFT
983	Radhakrishnan	63	M	92546	+	-	DEBRIDEMENT
984	Dhanam	65	M	97523	-	-	DEBRIDEMENT
985	Thirumurugan	73	M	92455	+	-	DEBRIDEMENT
986	Rasu	55	M	82248	-	-	DEBRIDEMENT
987	Mani	57	M	84325	-	+	DEBRIDEMENT
988	Janarthan	56	M	26877	-	-	DEBRIDEMENT
989	Laxmi	46	F	96326	-	-	DEBRIDEMENT
990	Velu	56	M	97642	+	-	AK AMPUTATION
991	Kumaran	63	M	86422	-	-	DEBRIDEMENT
992	Durga	54	F	86432	+	+	DEBRIDEMENT
993	Masanam	54	M	86544	+	-	TOE AMPUTATION
994	Pallikoodathan	45	M	72763	-	+	DEBRIDEMENT
995	Boominathan	57	M	40257	+	-	DEBRIDEMENT
996	Servai	54	M	60272	-	-	DEBRIDEMENT
997	Ganesan	67	M	27809	-	+	DEBRIDEMENT
998	Karpagam	56	F	69826	-	-	BK AMPUTATION
999	Sarada	48	F	70922	-	-	DEBRIDEMENT
1000	Ayngaran	76	M	99762	+	-	DEBRIDEMENT